ASSEMBLING EQUIPMENT IN THE PACKAGED DISASTER HOSPITAL

U.S. DEPARTMENT
OF HEALTH, EDUCATION,
AND WELFARE

PUBLIC HEALTH SERVICE

Health Mobilization Series F-14

ASSEMBLING EQUIPMENT IN THE PACKAGED DISASTER HOSPITAL

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PUBLIC HEALTH SERVICE
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INTRODUCTION

The hospital equipment discussed in this publication consists of items in the Packaged Disaster Hospital which are packed partially preassembled, but require additional on-the-spot assembly before they can be used. Some equipment can be completely set up and ready for operation after only minor adjustments, while other items involve complicated assembly procedures. The text is directed primarily to the nontechnician who will set up equipment, but will not use it. Use of equipment is explained only where it is impossible to fully explain assembly without also discussing usage.

This book will also be of assistance to the medical technician who is not thoroughly familiar with the particular equipment packed with the Packaged Disaster Hospital. In addition, it will help preassigned hospital staff members to become familiar with the setting-up operation.

Whether a Packaged Disaster Hospital is being set up as a training exercise or for acutal use following a natural or man-made disaster it is important, wherever possible, to conserve all crates, boxes, and packing material to facilitate the repacking job when the hospital is no longer needed.

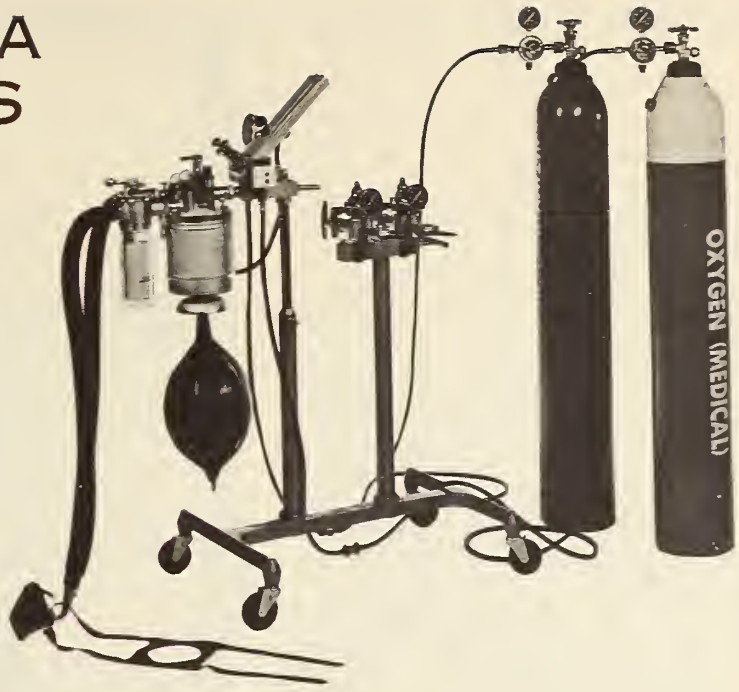
Some items necessary to the assembly and operation of the Packaged Disaster Hospital equipment are not included in the hospital and must be procured locally. These items are mentioned following each set of assembly instructions. Where possible and practical, they should be obtained locally and packed in or near the hospital storage site. There are sufficient tools packed with the hospital in a special tool box to accommodate all aspects of the setting-up operation. However, greater speed and working efficiency can be achieved if workers also supply additional tools of their own.

Each Series 62000 Packaged Disaster Hospital contains sufficient supplies and equipment to operate as a 200-bed general hospital for 30 days without resupply. Hospitals Series 54000, 55000, 56000, and 57000 were originally designed for shorter periods of operation but are now being brought up to the level of the 62000 Series through Supply Additions to the original hospital. Where the original equipment serves the same purpose, but is not identical to its equivalent in the 62000 Series Packaged Disaster Hospital, assembly instructions are included for the equipment in all other Series involved.

It has been necessary in certain instances to change Federal Stock Numbers. In such cases the old stock numbers are shown in parenthesis following new numbers. For example, in the case of the Centrifuge, the Stock Number is shown as 6640–689–6999 (6640–000–0103). The first number is the new officially designated Federal Stock Number; the number in parenthesis is now obsolete.

Manufacturer's manuals and assembly instructions are packed with most items discussed in this publication. Reference to these instructions may occasionally be advisable. It is recommended, however, that this manual be followed where a discrepancy occurs between instructions contained herein and the manufacturer's instructions. All procedures in *Assembling Equipment in the Packaged Disaster Hospital* have been carefully checked out and may be relied upon.

ANESTHESIA APPARATUS



FEDERAL STOCK NUMBER: 6515-000-0222

FEDERAL NOMENCLATURE: ANESTHESIA APPARATUS, GAS, NITROUS OXIDE, OXYGEN, AND ETHER

HOSPITAL SERIES: 62000

The following instructions apply specifically to the five Anesthesia units packed with each Series 62000 hospital. The yoke assembly on these units was designed to accommodate small (Type D) Oxygen and Nitrous Oxide cylinders. Since Series 62000 hospitals are equipped only with large (Type M) cylinders, it is necessary to bypass the yoke assemblies on 62000 Anesthesia units to allow direct attachment of the large cylinders. Anesthesia units in the 54000, 55000, 56000, and 57000 model hospitals are similar in design and assembly. However, these PDH's *do* come equipped with the small (Type D) cylinders which are attached directly to the yoke assembly.

After assembly, the absorber may be filled with soda lime and the ether vaporizer jar with ether. This should be done either by or under the supervision of an anesthesiologist or medical equipment technician who is completely familiar with anesthesia equipment of this type. It is suggested that the word "empty" be printed on a piece of adhesive tape and attached to the absorber by the person assembling the equipment if that person is not qualified to fill the absorber. This safety feature is not necessary with the ether vaporizer jar because it is made of glass and the state of its contents may be seen at a glance.

It is vital to keep in mind the importance of attaching Nitrous Oxide and Oxygen fittings snugly in order to avoid dangerous leakage. Connection of the apparatus to Nitrous Oxide and Oxygen cylinders will be simplified by remembering that all fittings are color-coded. Nitrous Oxide cylinders, fittings, and attachments are colored blue; Oxygen, green.

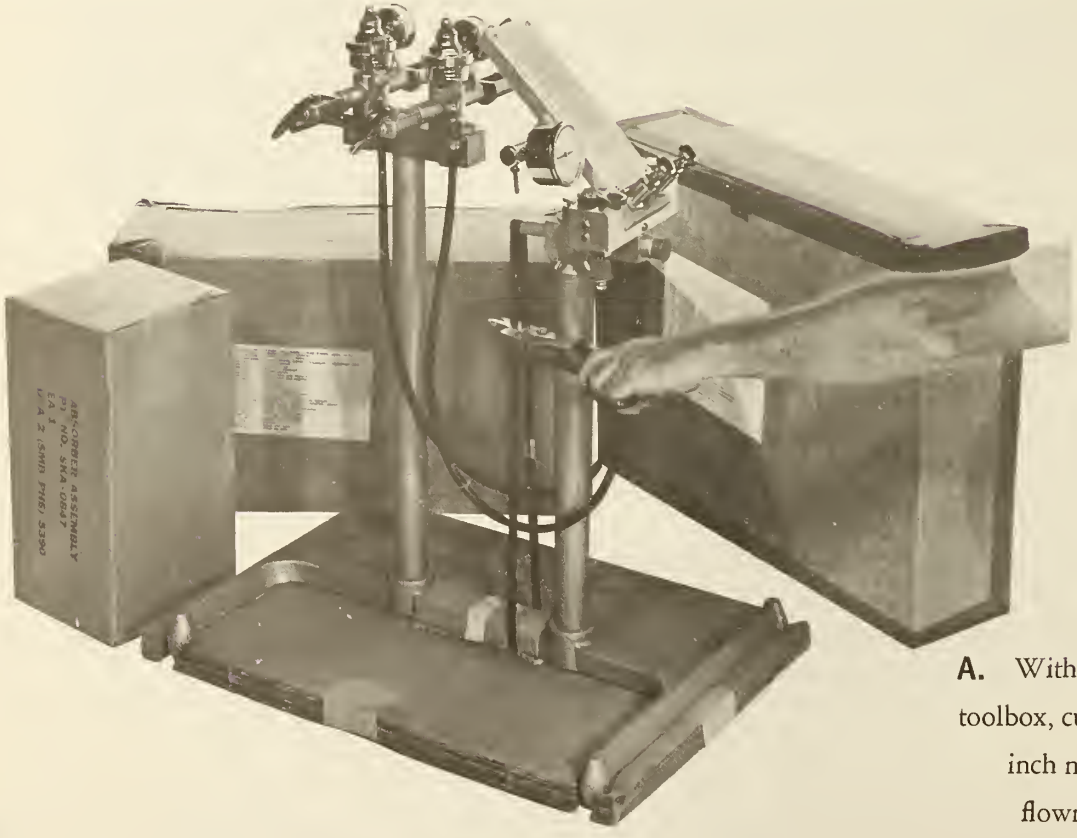
STEP 1:

A. To open wooden box, remove all screws from front panel. Panel will then fall forward. Tilt wooden box slightly and shake gently until fiberboard carton inside will slide forward a few inches.

B. With any sharp instrument, slit tape on fiberboard carton, allowing carton to remain in wooden box. Remove all corrugated packing. Remove box of components packed in front of Apparatus.

C. Pull forward on Anesthesia Apparatus, tipping slightly forward to remove. Remove other boxes of components. Take polyethylene cover from top of Apparatus. Remove protective tape.

STEP 2:



A. With tin snips from hospital toolbox, cut and remove one-half inch metal band which holds flowmeter assembly to base.

STEP 3:

A. Tip base slightly to insert casters. Casters lock into position with upward pressure.

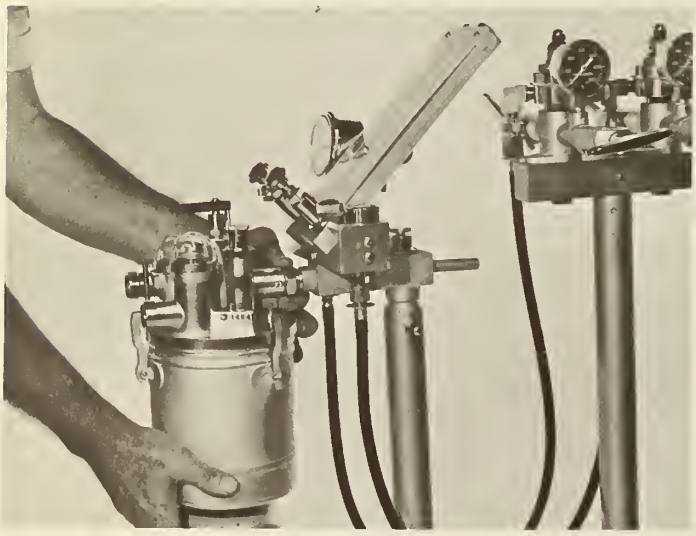
STEP 4:

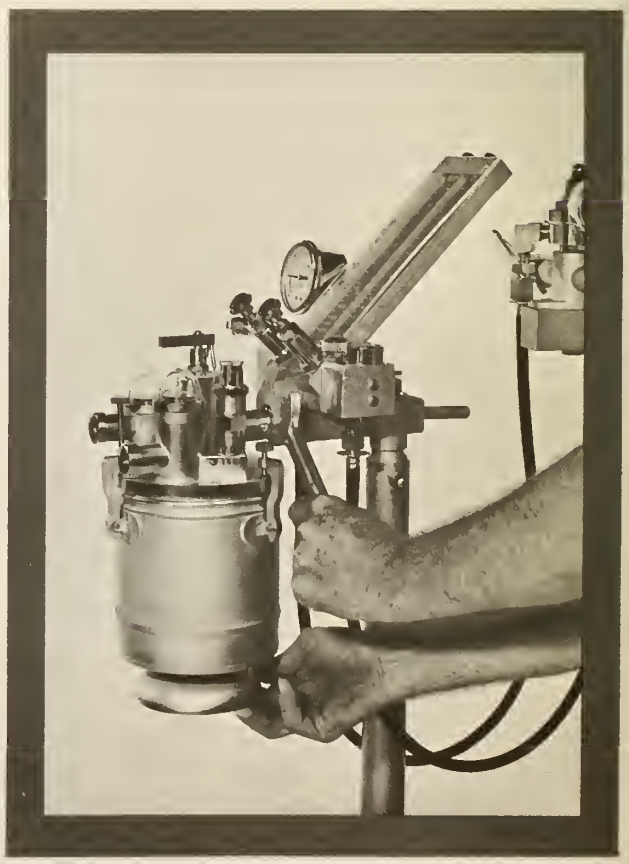
A. Lay out parts and identify as follows. These include everything necessary for the initial setting-up operation: (a) breathing tubes, (b) mask retaining strap, (c) mask, (d) rebreathing bag, (e) ether vaporizer assembly, (f) absorber assembly, (g) manometer adapter, (h) Y-connector, (i) bag holder assembly, (j) mask-catheter adapter, (k) regulator and hose for Oxygen, (l) regulator and hose for Nitrous Oxide, (m) tools, and (n) manometer delivery tube. (Additional equipment packed with Anesthesia Apparatus is for use with Laryngoscope, page 53.)

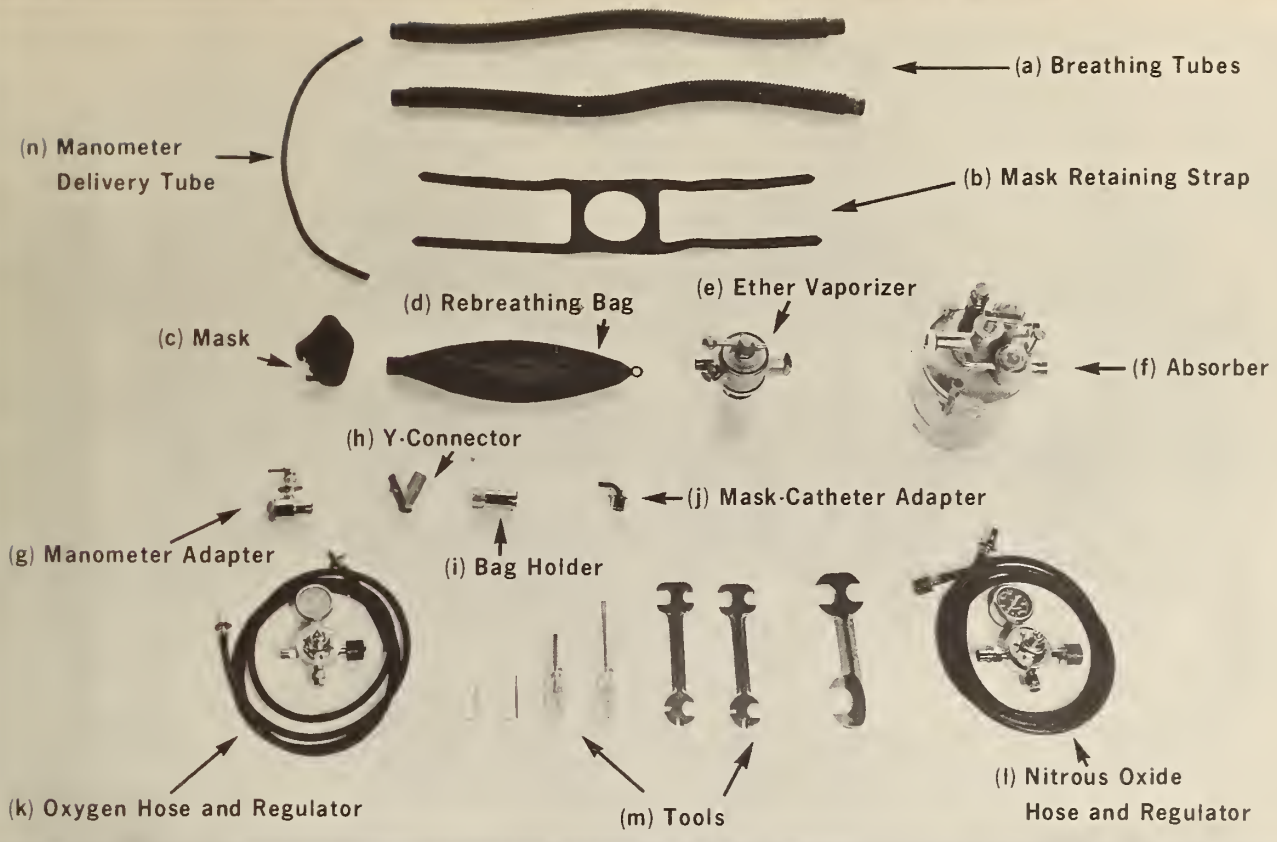
NOTE: *Make certain to tighten each connection with the proper tool (m). This will eliminate leakage which could prove harmful to patients and to medical personnel. Never smoke while working with anesthesia equipment. Never apply oil or grease to any part. Keep these simple rules in mind and you will not endanger yourself or anyone else connected with this equipment.*

STEP 5:

A. Connect the absorber assembly (f) to the gas head by placing screw attachment over ground fitting on gas head. Tighten with wrench (m).

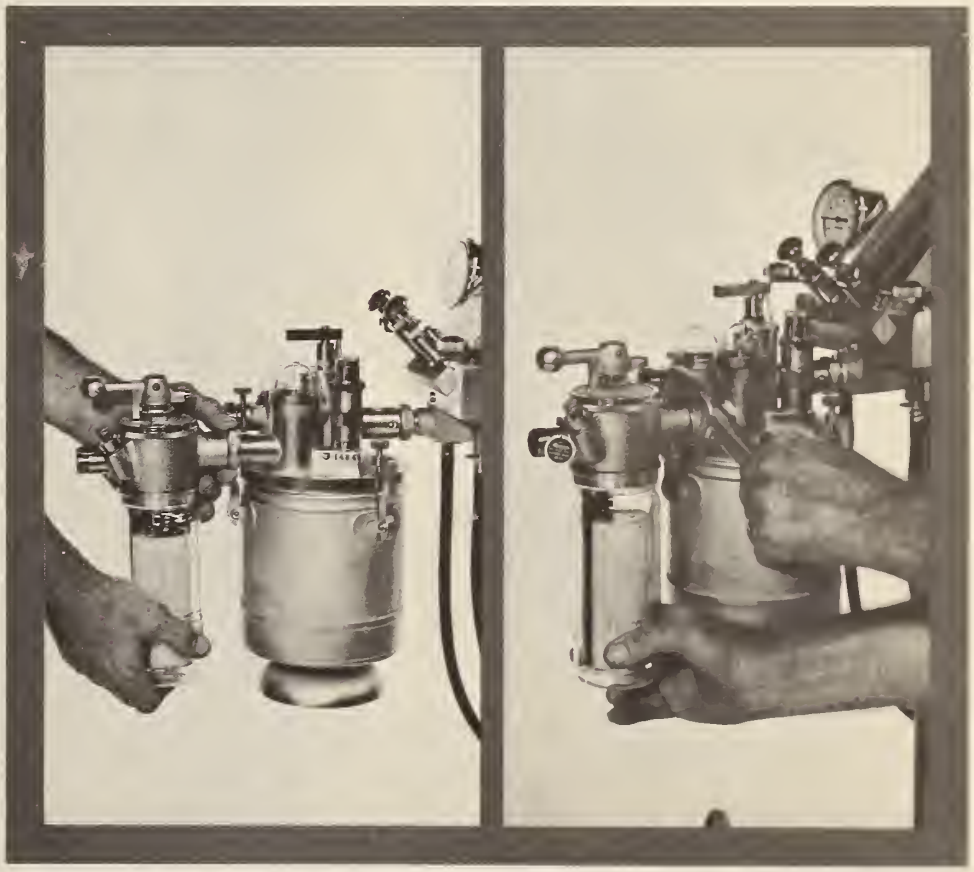


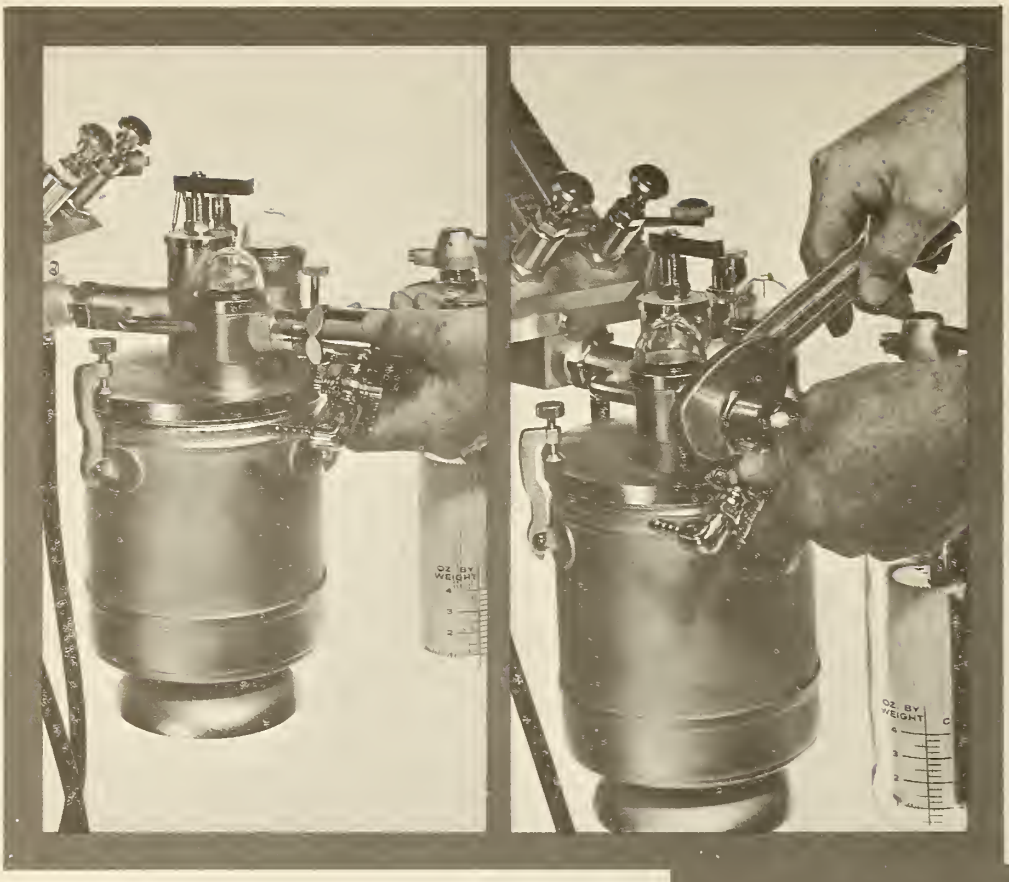




STEP 6:

A. Connect the ether vaporizer assembly (e) to the absorber (f) by screwing jar onto ground fitting on right side of absorber. Tighten with wrench (m). Do not turn any other movable part on either the absorber or ether vaporizer assembly.





STEP 7:

A. Attach manometer adapter (g) on ground fitting on left side of absorber (f). Tighten with wrench (m).

STEP 9:

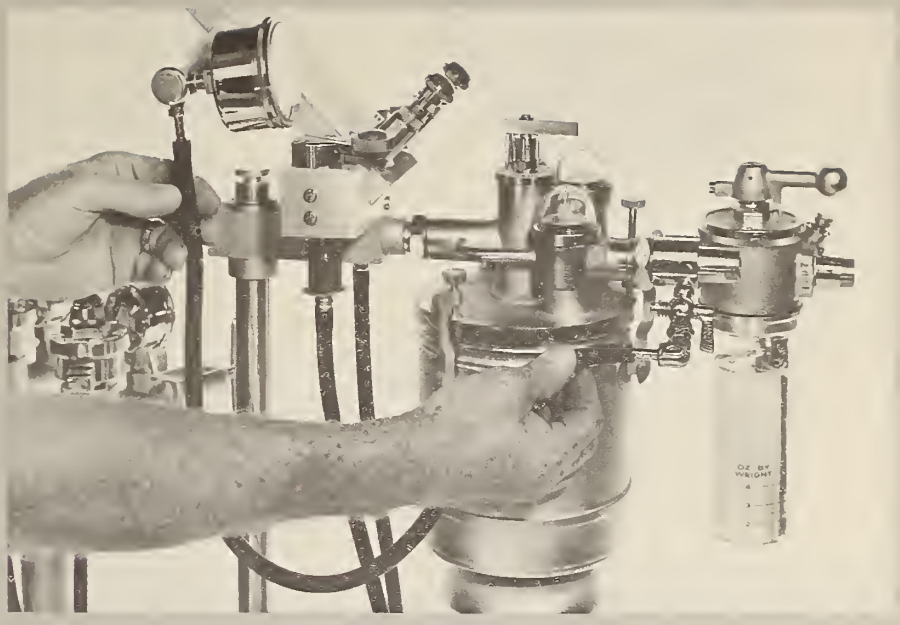
A. Connect breathing tubes (a) to grooved fittings on absorber (f) and ether vaporizer (e). Press firmly.

B. Connect other ends of breathing tubes (a) to Y-connector (h). Slip tube endings over Y-connector as far as possible.

STEP 8:

A. Connect manometer delivery tube (n) to hose fitting on manometer adapter (g). Press firmly to prevent leakage.

B. Attach other end of delivery tube (n) to hose fitting on manometer gauge. Press firmly in place.



A. Connect mask adapter (j) to Y-connector (h) by pushing small end of adapter into Y-connector.

B. Fit large end of adapter (j) into opening in mask (c).

STEP 11:

A. Rebreathing bag (d) is equipped with a rubber bushing which is not necessary for use with Anesthesia Apparatus, Federal Stock Number 6515–000–0222. Remove the bushing from the neck of the bag.

STEP 10:

Make certain adaptor is fitted snugly into opening in mask.

C. Attach mask retaining strap (b) to prongs on mask (c). Holes in strap permit adjustment to patient's head.

B. Stretch the mouth of the rebreathing bag (d) over the bag holder assembly (i), taking care not to tear the mouth of the bag.

C. Screw bag holder assembly (i) to bottom of absorber (f).

NOTE: *The following procedures are for one purpose only—that of bypassing the yoke assembly on the unit base. This is necessary because the assembly was built to hold small Nitrous Oxide and Oxygen cylinders. Since only large cylinders are packed with 62000 Series hospitals, the equipment must be adapted to use these cylinders.*

STEP 12:

A. After removing top from Oxygen cylinder, unscrew chained valve cap from cylinder. Screw regulator (k) on valve opening. Tighten with open end wrench (m), to prevent leakage. Do not turn knob on top of cylinder.

B. Attach hose (k) to fitting on regulator (k). Tighten with wrench (m). Discs with the word "Oxygen" will be colored green. Oxygen cylinders are white and green.

STEP 13:

A. After removing top from blue-and-white Nitrous Oxide cylinder, unfasten chained cap attached to valve opening. A washer is provided which is to be placed between nipple on regulator (l) and valve opening.

B. Screw regulator (l) to valve opening, washer between regulator and valve opening.

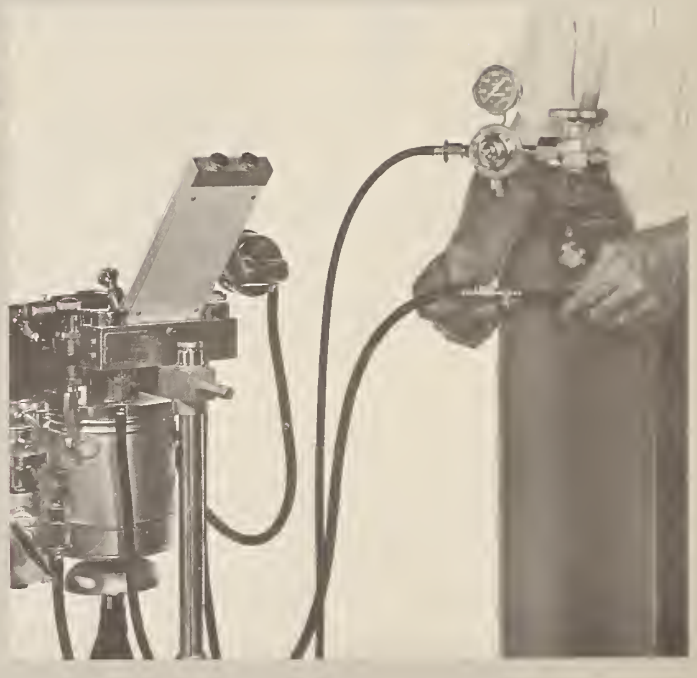
CAUTION: *Oxygen and Nitrous Oxide cylinders should be placed side-by-side. If there is any danger of tipping, they may be placed in a box.*

C. Disconnect hose on Oxygen side of yoke assembly on anesthesia unit. It will probably be necessary to loosen with a wrench.

D. Attach end of hose taken from yoke assembly to end of hose extending from Oxygen cylinder. Use two wrenches (m) as shown to tighten securely.

C. Tighten connection with wrench (m). Attach hose (l) to fitting on regulator (l), same as STEP 12, B.

D. Disconnect hose from Nitrous Oxide side of yoke assembly.



E. Connect end of hose taken from yoke assembly to end of hose (l) attached to regulator (l). Tighten with two wrenches (m) as in STEP 12, D. Note that discs on hose connected to Nitrous Oxide are colored blue.

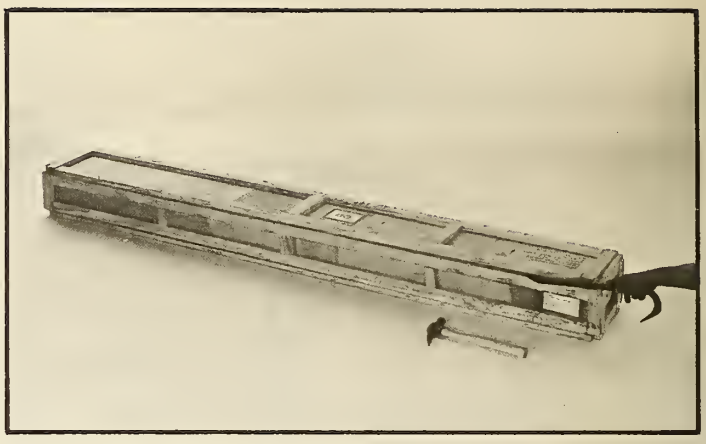
BALKAN FRAME

FEDERAL STOCK NUMBER:	**6530-000-0233**
FEDERAL NOMENCLATURE:	**FRAME, OVERHEAD, HOSPITAL BED, WOOD, BALKAN TYPE**
HOSPITAL SERIES:	**62000 AND SUPPLY ADDITIONS**

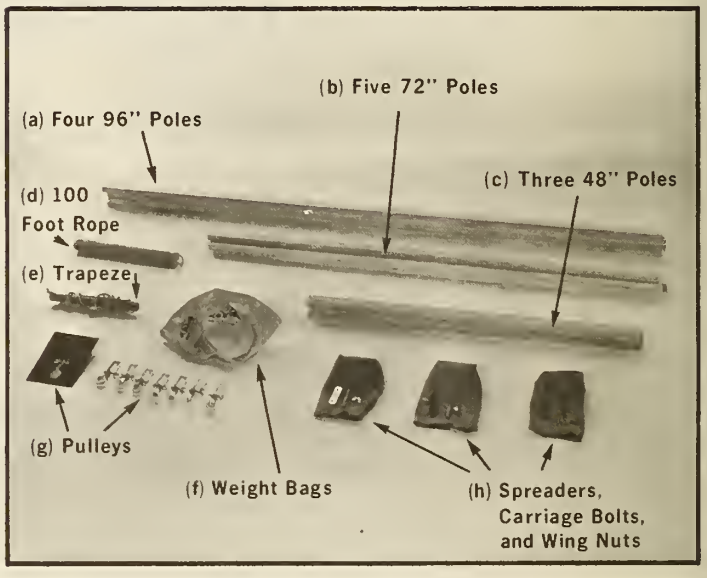
Two Balkan Frames are packed in each box. Assembly of the frame will be simplified if the exact number of components for one frame are removed from the box as listed in STEP 1, B. The frames are to be attached to Folding Cots, Federal Stock Number 7105–269–9279, packed with hospital. See page 35. Weights for bags are not included.

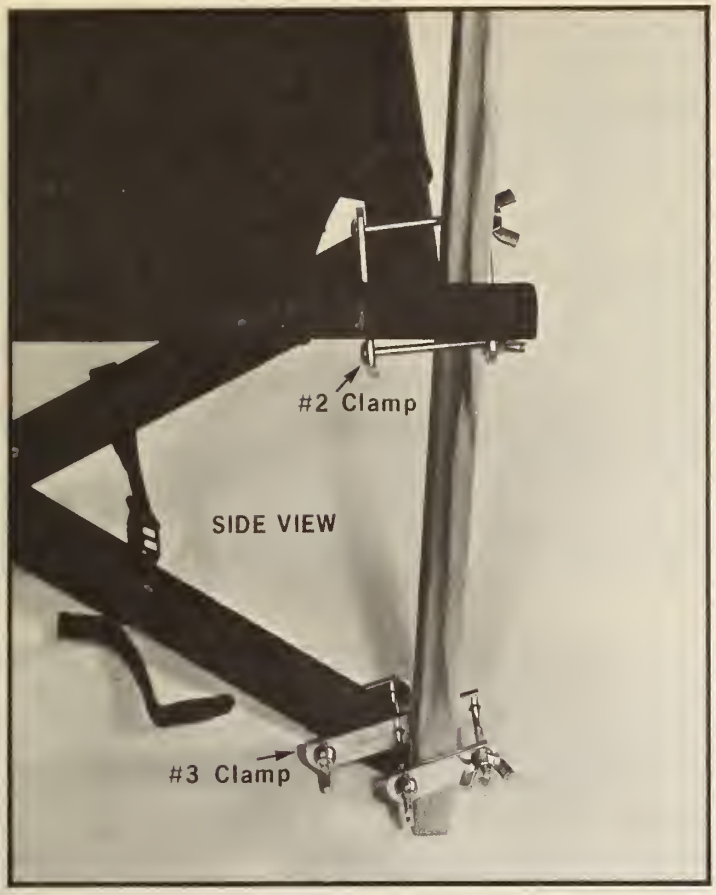
STEP 1:

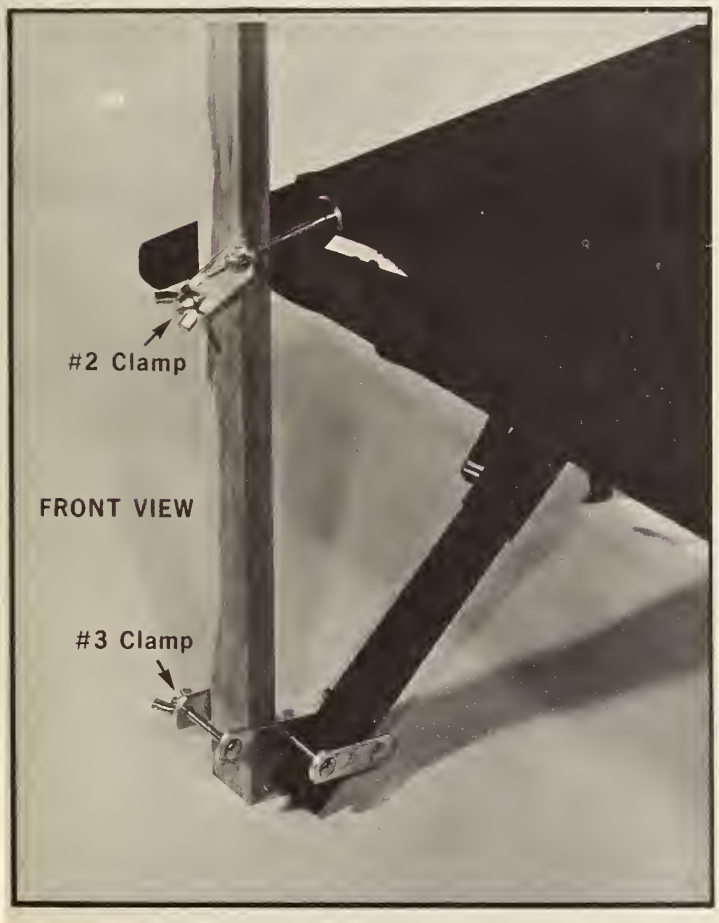
A. Open the wooden crate containing two Balkan Frames. A hammer and crowbar such as those found in the PDH toolbox will suffice.



B. Remove components for one frame. They are: (a) four 96″ poles, (b) five 72″ poles, (c) three 48″ poles, (d) 100-foot length of rope, (e) trapeze assembly, (f) two bags for weights, (g) eight pulley assemblies, (h) spreaders, carriage bolts, and wing nuts which form various clamp assemblies. Each frame requires eight No. 1 single clamps consisting of two 3⅛″ spreaders, two 4½″ carriage bolts, and nuts; twelve No. 2 single clamps consisting of two 4″ spreaders, two 3″ carriage bolts, and nuts; and four No. 3 double clamps made up of two 3⅛″ spreaders, one 5¼″ spreader, one 2″ carriage bolt, one 2½″ carriage bolt, one 4½″ carriage bolt, and nuts.





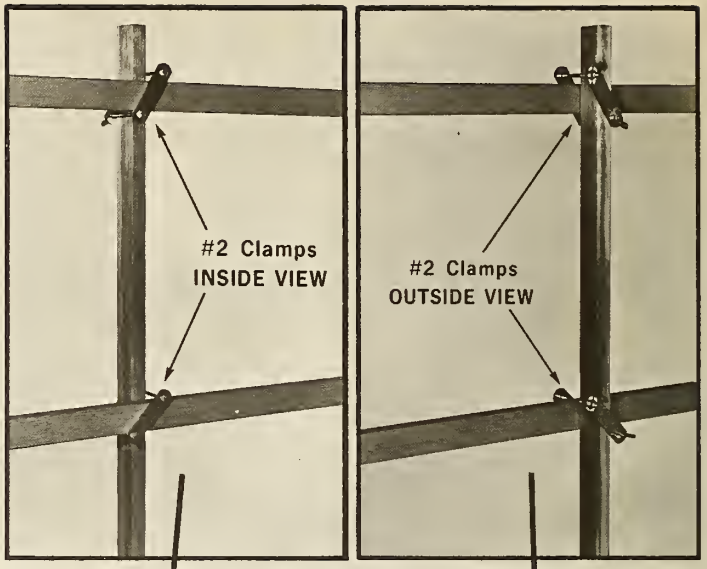


STEP 2:

A. Four 72" poles form the vertical support of the frame. One pole is placed at each corner of a Folding Cot with wide side of pole against side of cot. Fasten each pole to frame of cot with one No. 2 clamp. Then secure to lower legs of cot with one No. 3 double clamp. Illustrations Show front and rear views of No. 2 (upper) and No. 3 (lower) clamps.

STEP 3:

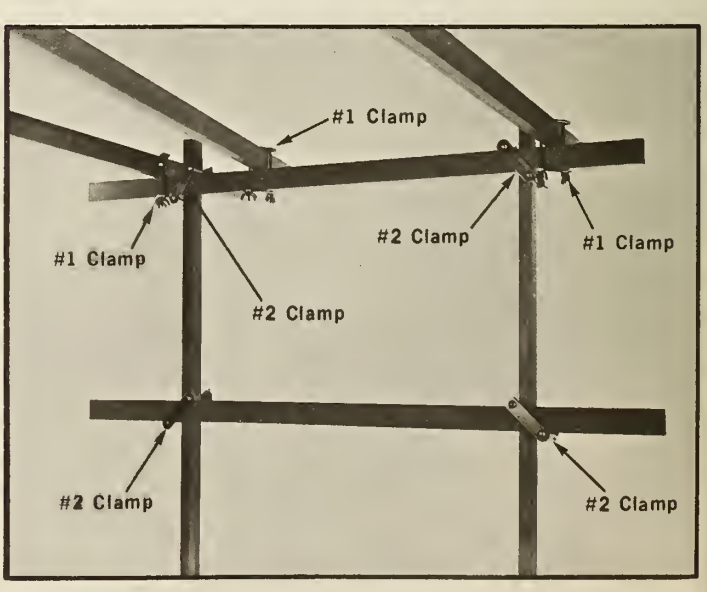
A. Position horizontally one 48″ pole across head end and one 48″ pole across foot end. Place inside the vertical poles about 3 inches from top with wide side of 48″ pole against vertical pole. Secure each end with one No. 2 clamp.

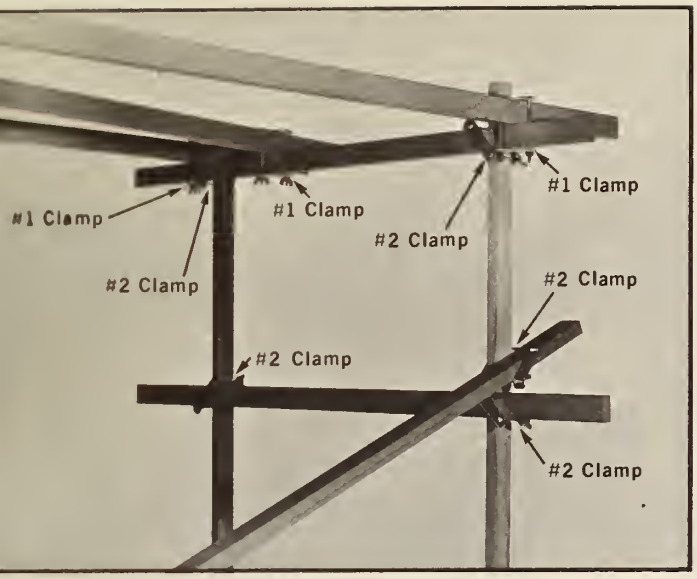


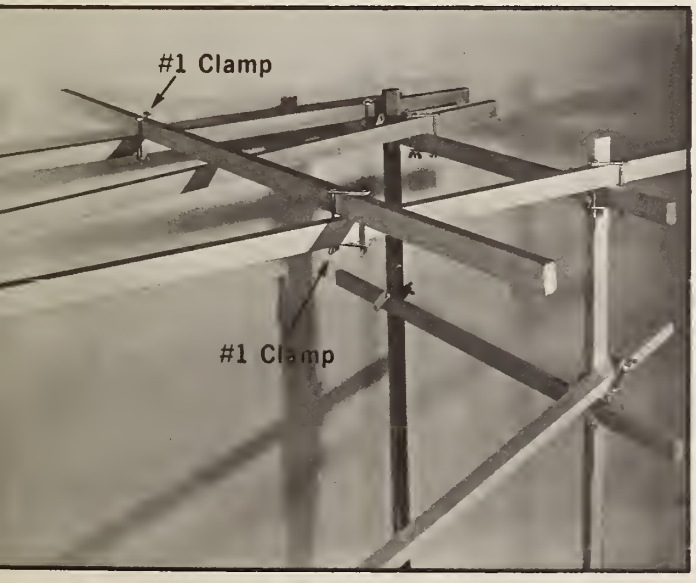
B. Place one 48″ pole across one end of cot about 18″ below top 48″ pole. Secure with No. 2 clamps.

STEP 4:

A. Place three 96″ poles on edge lengthwise across 48″ horizontal poles. Two 96″ poles are placed outside uprights and one is placed between uprights. Secure each end with a No. 1 clamp. Center pole will often be used as shown, placed diagonally from left of head end (double 48″ bars) to right of foot end.







STEP 5:

A. Position one 96″ pole with narrow edge against outside of two vertical poles, head to foot, about 1 foot above side of cot. Pole may be easily adjusted in this position. Fasten each end of pole with one No. 2 clamp.

STEP 6:

A. Lay one 72″ pole on edge near head of frame across top of the three overhead 96″ poles. Secure each end with a No. 1 clamp.

STEP 7:

A. Pulley assemblies and trapeze are positioned as directed by medical personnel. Examples are shown in photographs.

TO BE OBTAINED LOCALLY:

Buckshot, sand, or other heavy material to be used in bags for weights.

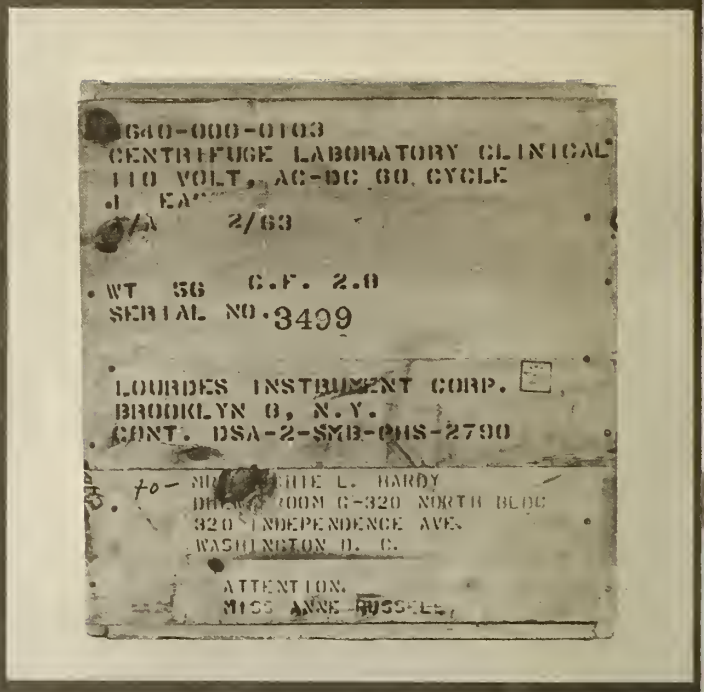
CENTRIFUGE

FEDERAL STOCK NUMBER:	6640-689-6999 (6640-000-0103)
FEDERAL NOMENCLATURE:	CENTRIFUGE, ELECTRIC, CLINICAL MODEL
HOSPITAL SERIES:	62000, 57000, 56000, 55000, 54000

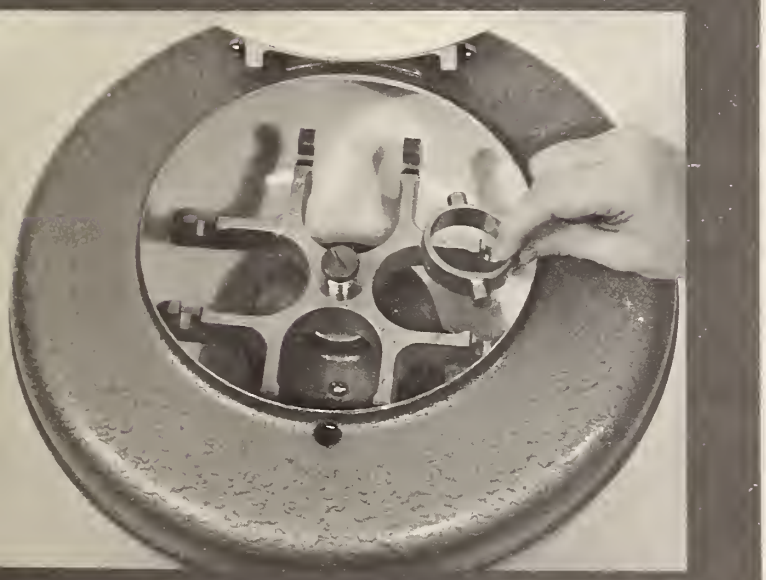
This centrifuge is wired for operation on 110–120 volts, 60-cycle, AC or DC, and is supplied with a three-pronged plug for use with a grounded system and an adapter for use with other standard outlets. For grounding instructions, see page 73, Step 4. Operation of the centrifuge will be briefly discussed in order to adequately explain its assembly.

STEP 1:

A. Open wooden box with hammer and screwdriver from hospital toolbox. Unpack components.



B. Check components against the following list: (a) centrifuge, (b) trunion head and nut, (c) rotor removal wrench, (d) trunion rings, (e) four-hole adapters, (f) hematocrit rotor, (g) hematocrit rotor cover, (h) gasket for hematocrit rotor, (i) rubber cushions for use in four-hole adapters. Also included is a Spiracrit Reader (j).



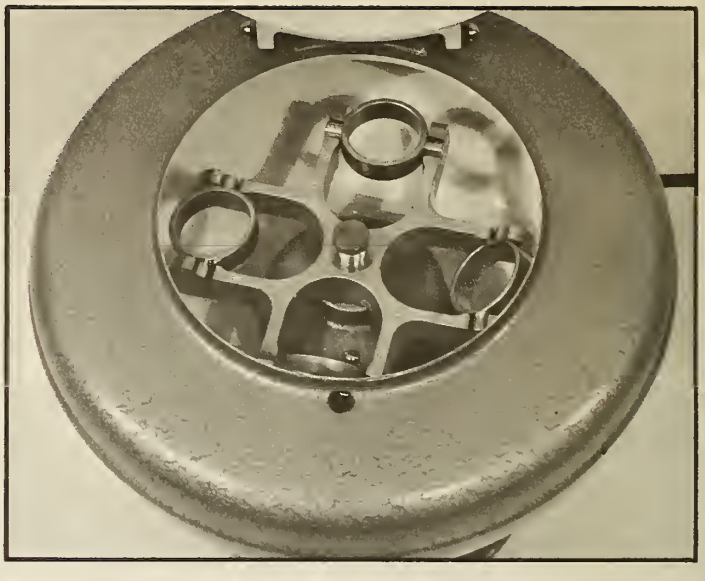
STEP 2:
TO USE WITH TRUNION HEAD:

A. Place trunion head (b) over motor shaft extension inside centrifuge bowl (a).

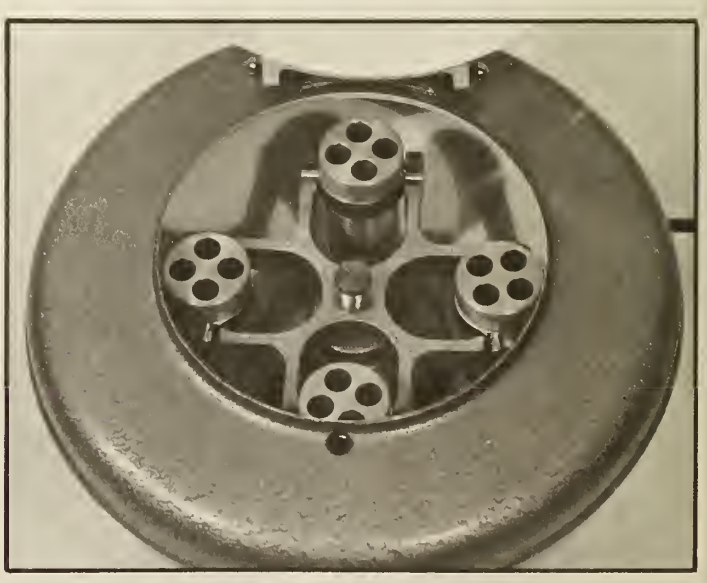
B. Place nut (b) over fitting in center of trunion head (b) and tighten with wrench (c).

C. Trunion rings (d) fit in slots in trunion head (b).

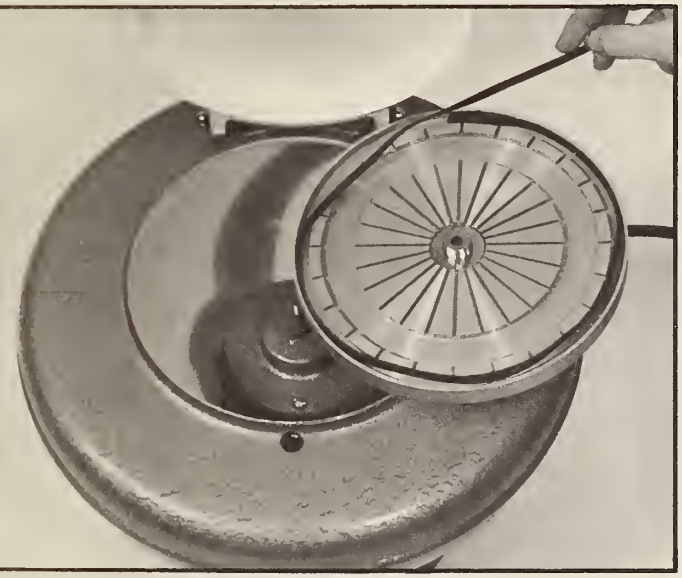
D. Position four trunion rings in slots. When operating centrifuge, all rings must be filled in order to properly balance load.



E. Adapters (e) are dropped into trunion rings (d), holes up. Drop all four adapters into place to properly balance load.

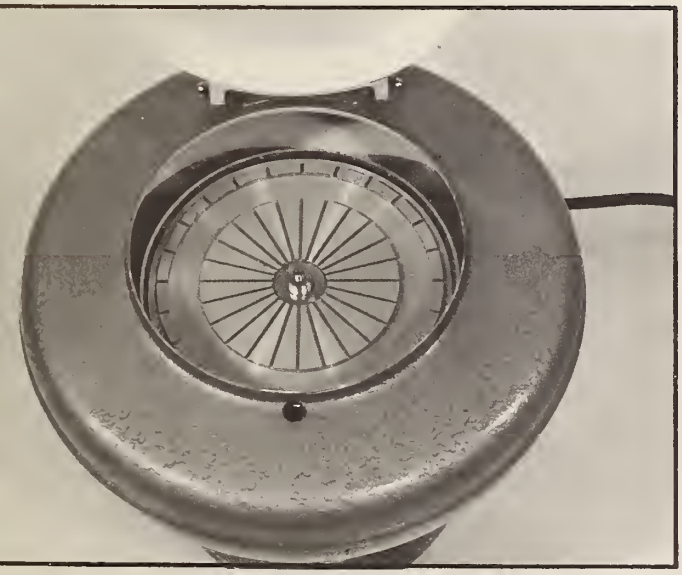


F. Before tubes are placed into holes in adapters (e), it is necessary that a cushion (i) be placed in each hole. This prevents breakage of tubes.



STEP 2A:
TO ATTACH HEMATOCRIT ROTOR

A. Gasket (h) is cut to fit inside wall of rotor (f). Ends must meet. Gasket is attached to wall by applying a thin coat of silicone grease on the side of the gasket touching the wall. Silicone grease is not included in the PDH.



B. Lower rotor (f) into centrifuge bowl (a), over motor shaft.

C. Lower rotor cover (g) over rotor (f).

D. Fit projections on wrench (c) into two holes in rotor cover (g) to tighten.

NOTE: *With the exception of A, all of Step 2A is followed only after the hematocrit rotor is ready for use.*

TO BE OBTAINED LOCALLY:
Silicone grease.

DENTAL CHAIR

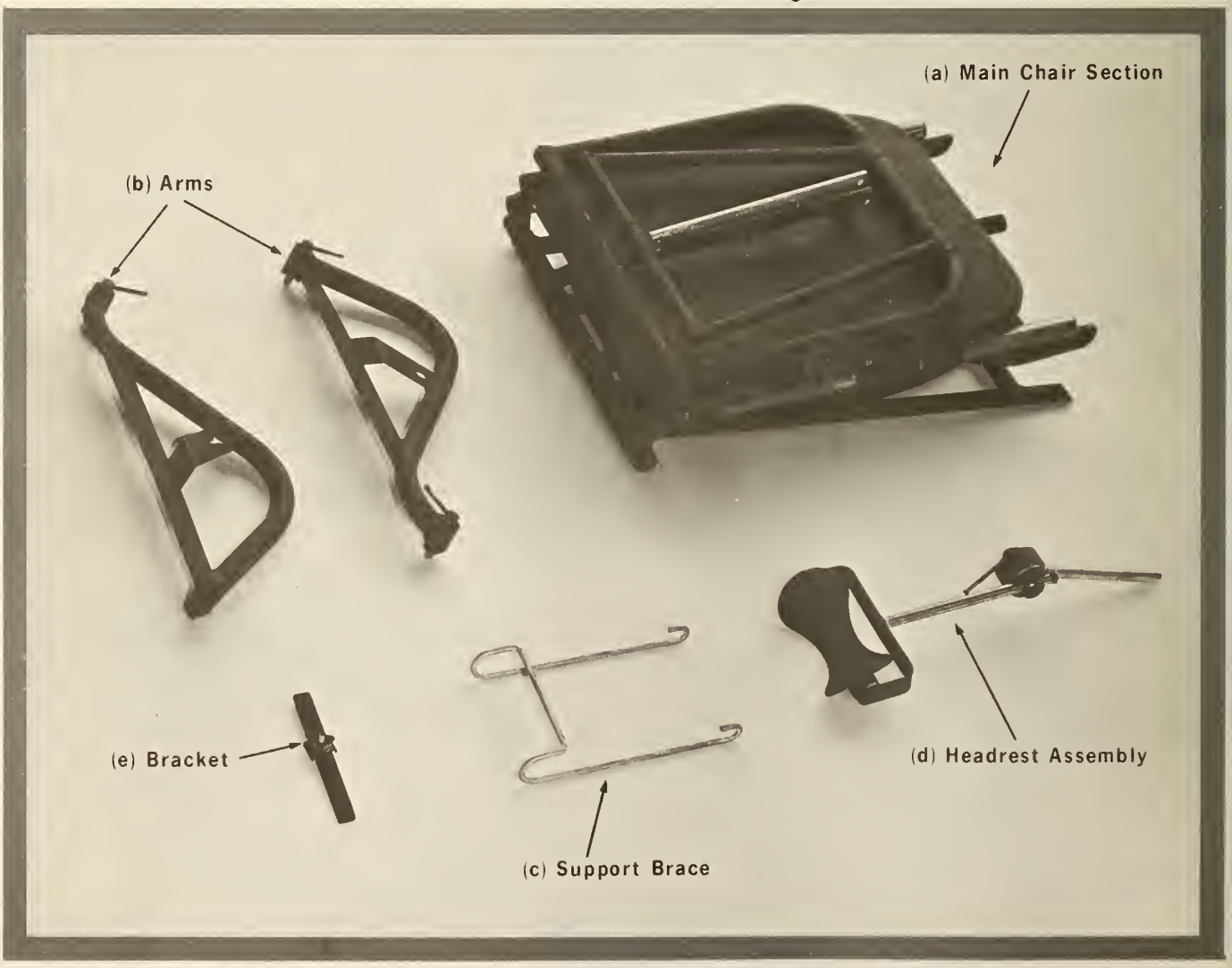
FEDERAL STOCK NUMBER:	6520-514-3255
FEDERAL NOMENCLATURE:	CHAIR, DENTAL OPERATING
HOSPITAL SERIES:	62000 AND SUPPLY ADDITIONS

Dental chairs are packed in cleated plywood boxes with the exception of those designated for tropical storage. They are then packed in moisture-proof 30-gallon steel drums. Removable drum lids provide easy access to chair parts.

STEP 1:

A. Open box with hammer and screwdriver or other appropriate tool from hospital toolbox.

B. Remove the following components from protective paper wrapping:
(a) main chair section, (b) arms,
(c) support brace, (d) headrest assembly, and bracket (e).



STEP 2:

A. Placing chair (a) on floor, raise seat and back sections up, leaving legs on floor.

B. Insert perforated steel tube on leg assembly into tube on back chair brace. Secure with locking pin chained to leg brace. Locking pin may be placed in any hole and later changed to another hole if leg adjustment is necessary.

STEP 3:

A. Place hooked end of support brace (c) over hinged portion of leg brace, hooks facing away from seat assembly. Fit curved portion of support brace over top of leg assembly as shown. See Step 4 photo for rear view of support brace positioned properly.

STEP 4:

A. Pull up on footrest. Insert steel rod on footrest into rod extending from back of seat. Insert locking pin to hold in place. Lower seat toward floor.

STEP 5:

A. Arms (b) are attached by inserting hand turn screws attached to arms into holes in frame of seat and back. Tighten securely by turning lever on hand turn screw.

STEP 6:

A. Attach headrest (d) to seat back by inserting steel rod on headrest into bracket on chair back. Headrest may be raised or lowered by releasing and then retightening hand turn screw on headrest.

NOTE:

Bracket (e) for implements which may be obtained locally may be slipped into hole in chair arm so that it will not be misplaced and may be used as required. Bracket is shown in place on arm of chair set up and ready for use, first photo.

Instrument (Mayo) Stand, page 95, may be used as substitute for a bracket table. This stand is adequate for instruments used in oral surgery and other emergency dental procedures.

FIELD COMMODE

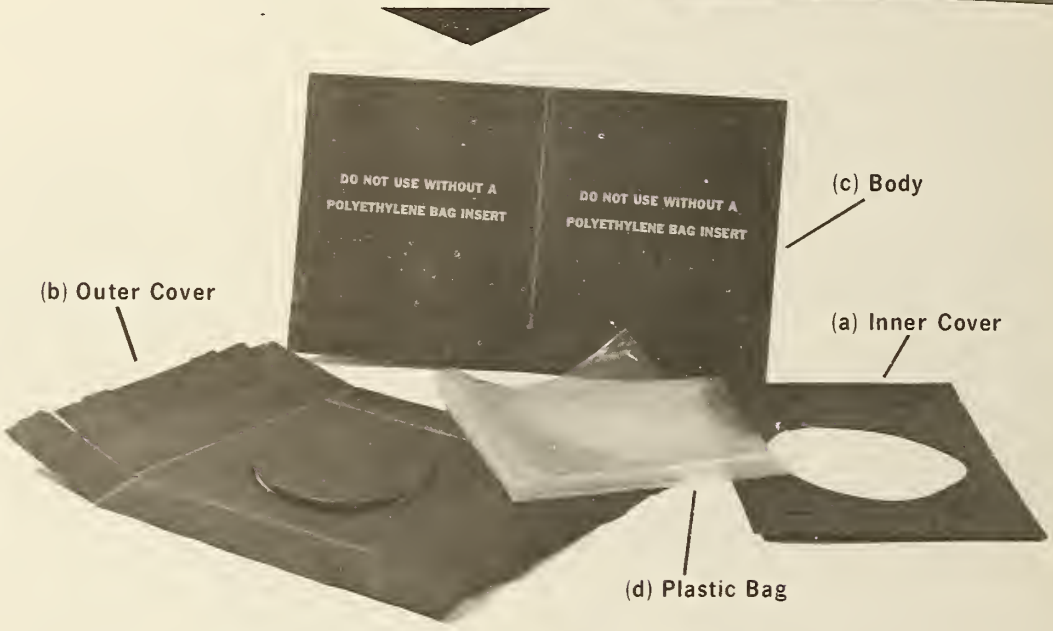
FEDERAL STOCK NUMBER:	**6530-781-3720 (6530-000-0013)**
FEDERAL NOMENCLATURE:	**COMMODE, FIELD, COLLAPSIBLE, FIBERBOARD**
HOSPITAL SERIES:	**62000 AND SUPPLY ADDITIONS**

Extra polyethylene bags, Federal Stock Number 8105–000–0002, for use with the Field Commode are packed with each hospital.

STEP 1:

A. Slit tape on fiberboard carton with any sharp instrument. Remove contents, including plastic bag.

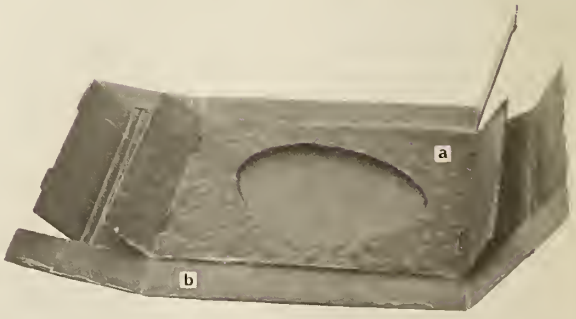
B. Only four pieces are involved in the assembly of the Field Commode. They are: (a) inner cover, (b) outer cover, (c) body, and (d) plastic bag.



STEP 2:

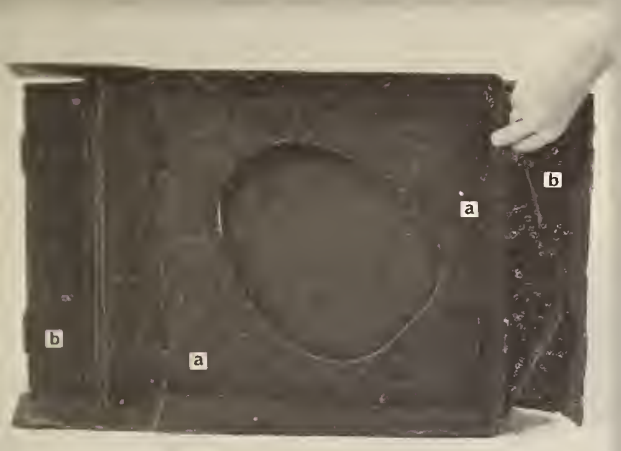
A. Prefold on all scored creases. Do not attempt to force. Each crease has been scored to fold in only one direction which may be accomplished easily.

B. Place (a) over (b), matching contour of hole in (a) with hole in hinged lid of outer cover (b).



STEP 3:

A. Fold one end of (a) up. Fold flaps on (b) outside and against end of (a).



B. Fold end of (b) over end of (a) and flap of (b) and press tabs on (b) into slots in (a). Repeat Step 3, A and B, for other end. Top of commode is now assembled, complete with closing lid.

STEP 4:

A. Fold scored ends of (c) outward to form base for commode body.

B. Place plastic bag in body of commode and fold over outside of top of body at least 4 inches. Place cover (lid) on body.

CANVAS COT

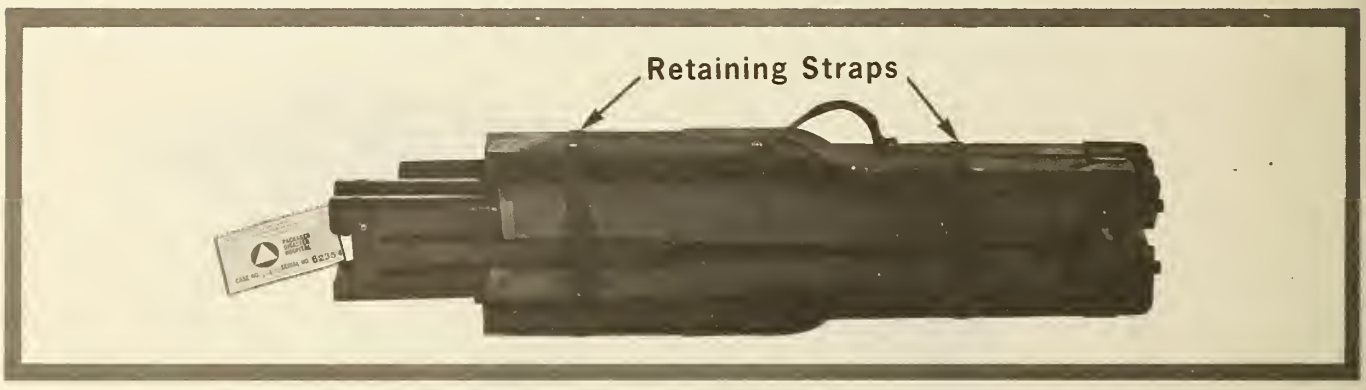
FEDERAL STOCK NUMBER:	7105-269-9279
FEDERAL NOMENCLATURE:	COT, FOLDING, CANVAS COVER
HOSPITAL SERIES:	62000, 57000, 56000, 55000, 54000

In most stored Packaged Disaster Hospitals, two cots will be wrapped together in kraft paper and secured with two metal bands. When packed for tropical storage, three cots are encased in a moisture-proof cylindrical aluminum drum. To open the drum, lift the two levers on the top of the lid. Using the levers as handles, unscrew and remove the lid.

STEP 1:

A. Cut two metal bands using metal shears found in the hospital toolbox. Remove paper. Set one cot aside for later assembly. Use handle for carrying.

B. Unfasten retaining straps. This will release the two end sticks.



STEP 2:

A. Pull both ends away from center legs which will remain upright. Grasp end legs and pull outward until frame forms a straight line.

B. Turn cot over so three sets of legs touch floor. Straighten canvas cover and pull upward. Spread three sets of legs and press canvas cover into place.

STEP 3:

A. Insert end stick through casing in one end of canvas cover. Place holes in ends of stick over knobs on each side of cot frame.

B. Stretch canvas as far as possible toward empty casing and insert second end stick into casing. One hole of second end stick must be inserted on knob on frame as shown in order to facilitate the insertion of the second stick. Cots previously used will be sufficiently stretched so that the other end of the second stick may be secured by merely stretching the canvas.

C. When the cot has not been used, it may be necessary to apply force in order to secure the second end stick. A good way is to sit on the floor with left foot braced against top of right cot leg and right foot against bottom of left leg of cot. Grasp end piece and pull until hole slips over knob. Some experienced medical supply personnel prefer to apply pressure with a crowbar.

D. As a safety measure, the retaining straps should be fastened to the legs once the cot is assembled. The straps may also be used to hold patients personal effects.

LITTER COT

FEDERAL STOCK NUMBER: 7105-000-0212
FEDERAL NOMENCLATURE: COT, LITTER
HOSPITAL SERIES: 62000 AND SUPPLY ADDITIONS

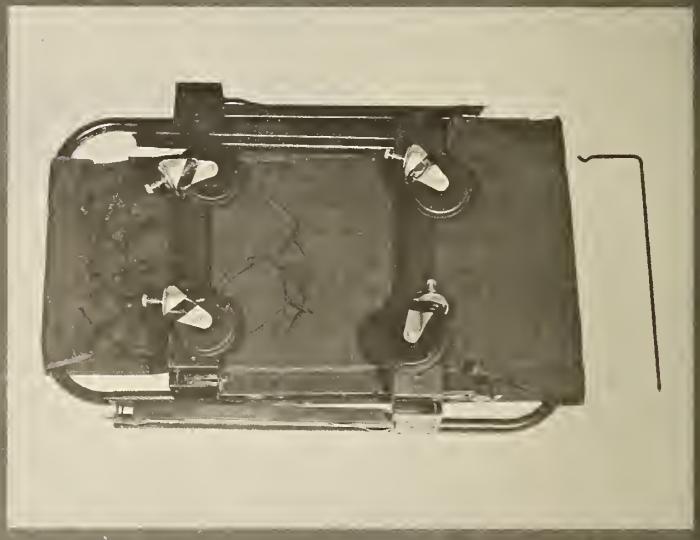
This litter cot may be used as two single cots, as a stationary double-decker cot with all legs extended, or as a litter for moving patients from one hospital area to another. Two irrigator rods are included with each set of litter cots. Holes for attaching the rods are located at either end and on both sides of each litter cot. Litters are more easily assembled by two people, but can be managed by one.

STEP 1:

A. Open tri-wall fiberboard carton by slitting tape with any sharp instrument. Remove two litter cots and two irrigator rods. Each litter cot consists of two separate pieces before assembly.

STEP 2:

A. Place litter cot to be assembled on floor with wheels facing up as shown.



B. Separate two halves. Extend canvas cover full length. Remove tape holding wheels in place. Nuts and washers are attached to wheels.

STEP 3:

A. Insert wheel into axle assembly. Place washer on wheel screw, then tighten nut over washer. Repeat on all four wheels. Use open end wrench and/or pliers found in PDH toolbox to tighten nuts.

STEP 4:

A. Stand canvas half of litter cot upright. Push canvas down over metal frame until about 5 inches of frame protrudes.

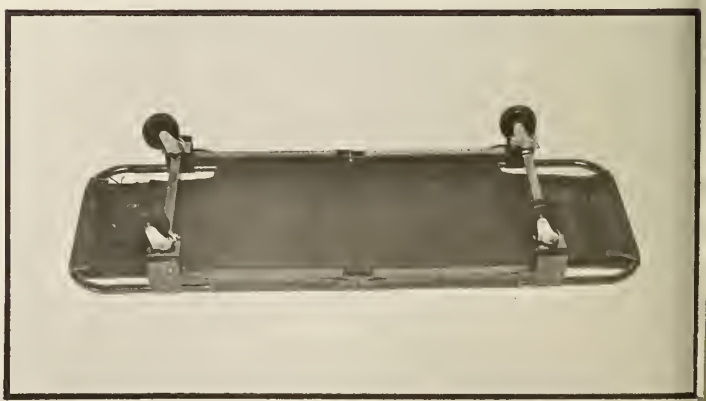
STEP 5:

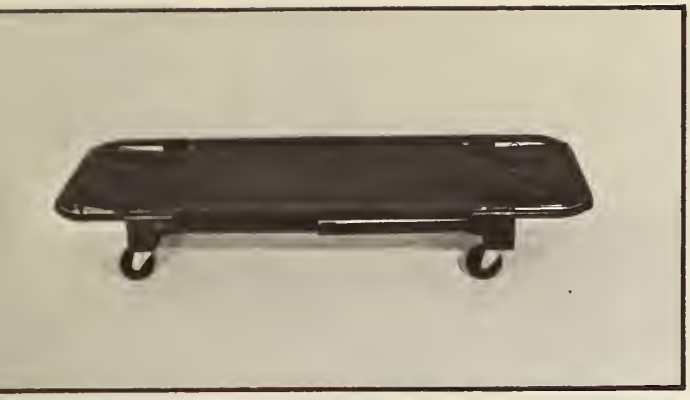
A. Still holding canvas half upright, raise other half of frame and slide upper half of tubular frame into canvas half. It will be necessary to exert considerable pressure to force inner tubes into outer. Once inserted, press until tubes lock in position.

STEP 6:

A. Pull canvas over side frame, extending over end of frame and lace as shown. Tie securely.

B. Loosen or tighten prelaced end of cover as necessary, making certain to retie securely.





C. Turn litter cot over—it is now ready for use as a single, easily moveable unit. Note legs still held in place with pins.

STEP 7:

A. Pins located on leg support assembly and on bottom of legs are a key to the versatility of this particular litter cot. To release leg from horizontal position, disengage pin from retainer hole by pulling forward.

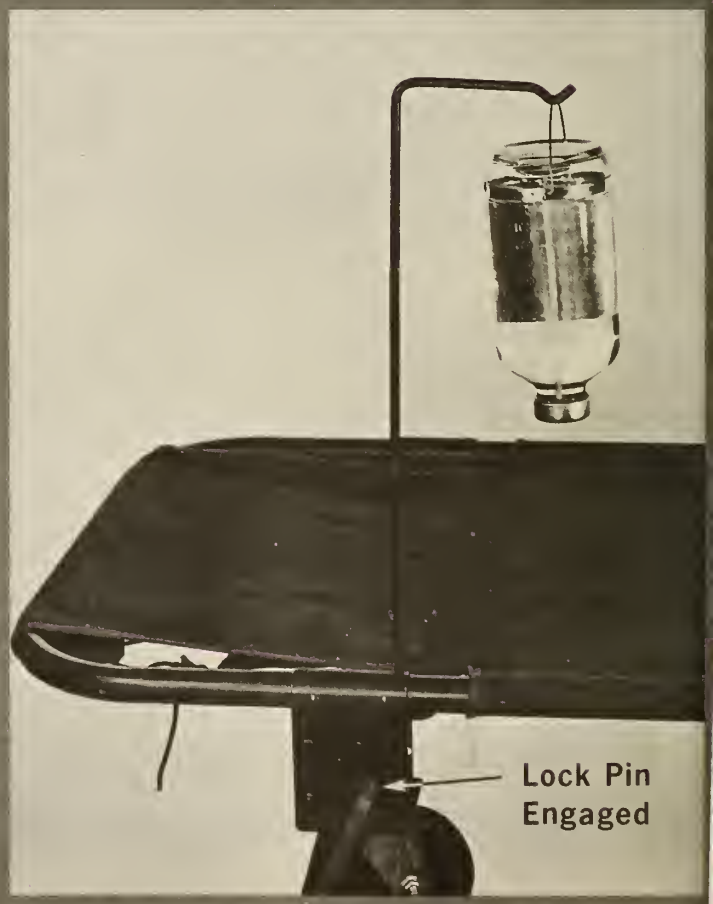
B. Pull legs down and lock pins in holes at tops of legs. Unit may now be used as stationary litter cot, or may be placed on lower litter cot to form a double-decker.

STEP 8:

A. When litter cot is to be used as top section of a double-decker, legs are locked in "down" position. Slotted legs of the upper litter cot should then be dropped over tubular frame of lower litter cot and locked into place with spring clip retaining pin which snaps into place when released. When all four pins are locked, the upper litter cot cannot slide off the lower.

STEP 9:

A. Irrigator rod is attached by placing in one of the several holes provided at either end of litter cot. Rod is shown holding a bottle for intravenous injection.



DRAINAGE AND SUCTION APPARATUS

(Wangensteen-Phelan)

FEDERAL STOCK NUMBER:	6515-326-8875
FEDERAL NOMENCLATURE:	DRAINAGE AND SUCTION APPARATUS, WANGENSTEEN-PHELAN TYPE, PORTABLE
HOSPITAL SERIES:	62000, 57000, 56000, 55000, 54000

Completely assembled, this apparatus is packed in a tri-wall carton, easily opened by slitting tape with any sharp instrument. The following instructions are for preparing the unit for use with patients.

STEP 1:

A. Procure a one-gallon jug-type bottle, Federal Stock Number 6530–326–8880.

B. Plug stopper on hose firmly into bottle. Make certain the connection is tight so that no leakage will occur.

STEP 2:

A. Attach extension tube to connector on stopper. Again, make certain connection is tight and leak-proof.

STEP 3:

A. Obtain Connector, Federal Stock Number 6640–000–0204. Insert connector into extension tube. Connector is then fastened to equipment going to patient, in this case a nasal catheter. Nasal catheter is packed with Inhalator, Federal Stock Number 6515–079–4288 (6515–000–0129). Aspirating catheters are packed with Anesthesia Apparatus, Federal Stock Number 6515–000–0222.

INHALATOR

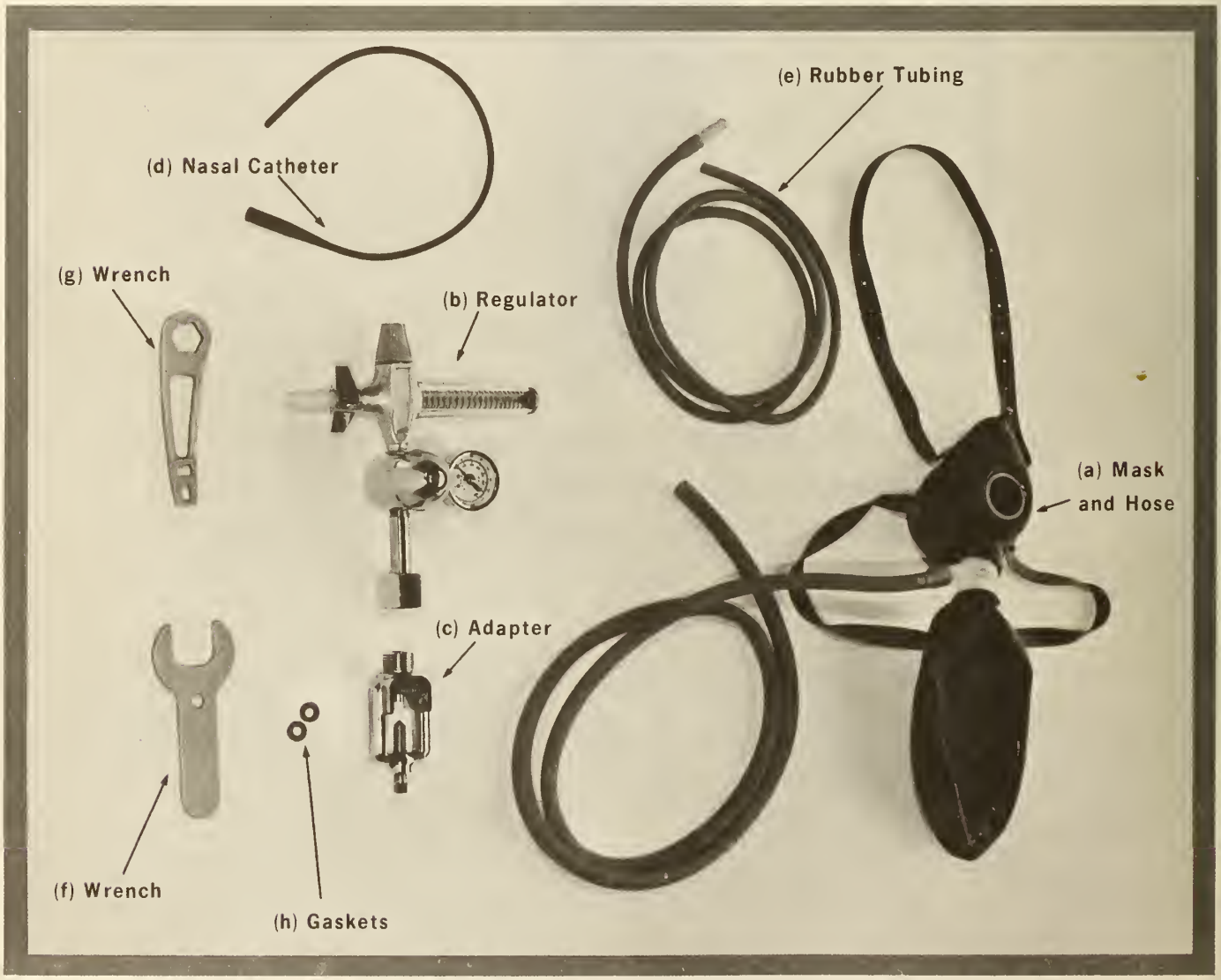
FEDERAL STOCK NUMBER: 6515-079-4288 (6515-000-0129)
FEDERAL NOMENCLATURE: INHALATOR, SINGLE
HOSPITAL SERIES: 62000 AND SUPPLY ADDITIONS

This inhalator may be used without an adapter with Type M Oxygen cylinders packed with the 62000 Series Hospitals. An adapter is included for use with Type D cylinders found in 54000 through 57000 Series PDH's.

STEP 1:

A. Components are packed in a corrugated carton easily opened by slitting tape with any sharp instrument.

B. Components include (a) mask with hose attached, (b) regulator, (c) adapter, (d) nasal catheter, (e) rubber tubing for use with catheter, (f) wrench for tightening nut on regulator, (g) wrench for securing adapter to small tank of Oxygen, (h) washers for use with adapter. When using the large (Type M) Oxygen cylinder, set aside the adapter (c), wrench (g), and washers (h). In some instances the adapter (c) will be attached to the regulator (b). If the adapter is not to be used, simply unscrew.



STEP 2:

(FOR USE WITH TYPE M OXYGEN CYLINDERS)

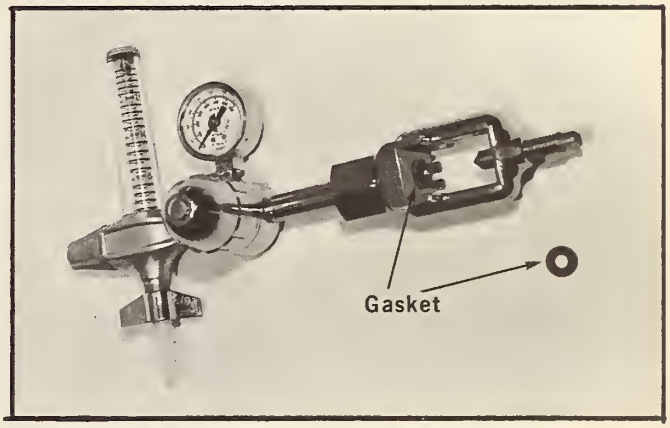
A. Remove cover from top of Type M Oxygen cylinder and set aside. Unscrew cap chained to valve assembly at top of tank. Use crescent wrench (f), if necessary.

B. Screw regulator (b) to valve assembly on tank. Use crescent wrench (f) to tighten thus preventing dangerous leakage.

ALTERNATE STEP 2,

(FOR USE WITH TYPE D OXYGEN CYLINDERS)

A. When small (Type D) Oxygen cylinders are available, it is necessary to use the adapter (c) in order to attach the regulator (b) to the cylinder. Firmly tighten adapter to regulator and place gasket (h) over adapter check valve as shown. A spare gasket is included.



B. Slip adapter (c) over top of cylinder and tighten, holding screw with wrench (g).

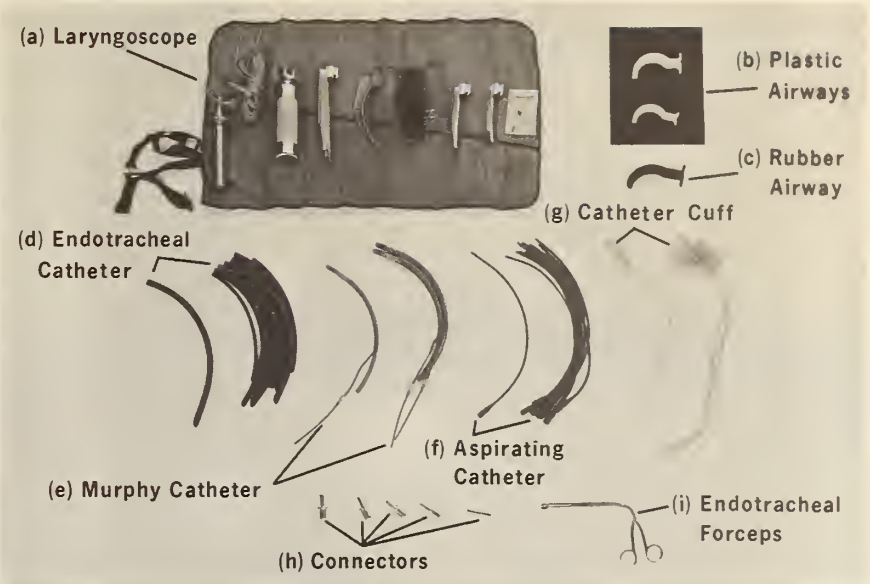
STEP 3:

A. To use mask, attach hose connected to mask (a) to nylon connector on regulator (b) by firmly pushing rubber tubing up over connector until connector is covered by tubing.

B. To use nasal catheter (d), attach connector on catheter to rubber tubing (e). Tubing is pressed over connector on regulator (b).

LARYNGOSCOPE AND ASSOCIATED EQUIPMENT

(Packed with Anesthesia Apparatus, FSN 6515–000–0222)



FEDERAL STOCK NUMBERS: VARIED (SEE BELOW)

FEDERAL NOMENCLATURE: SEE BELOW

HOSPITAL SERIES: 62000

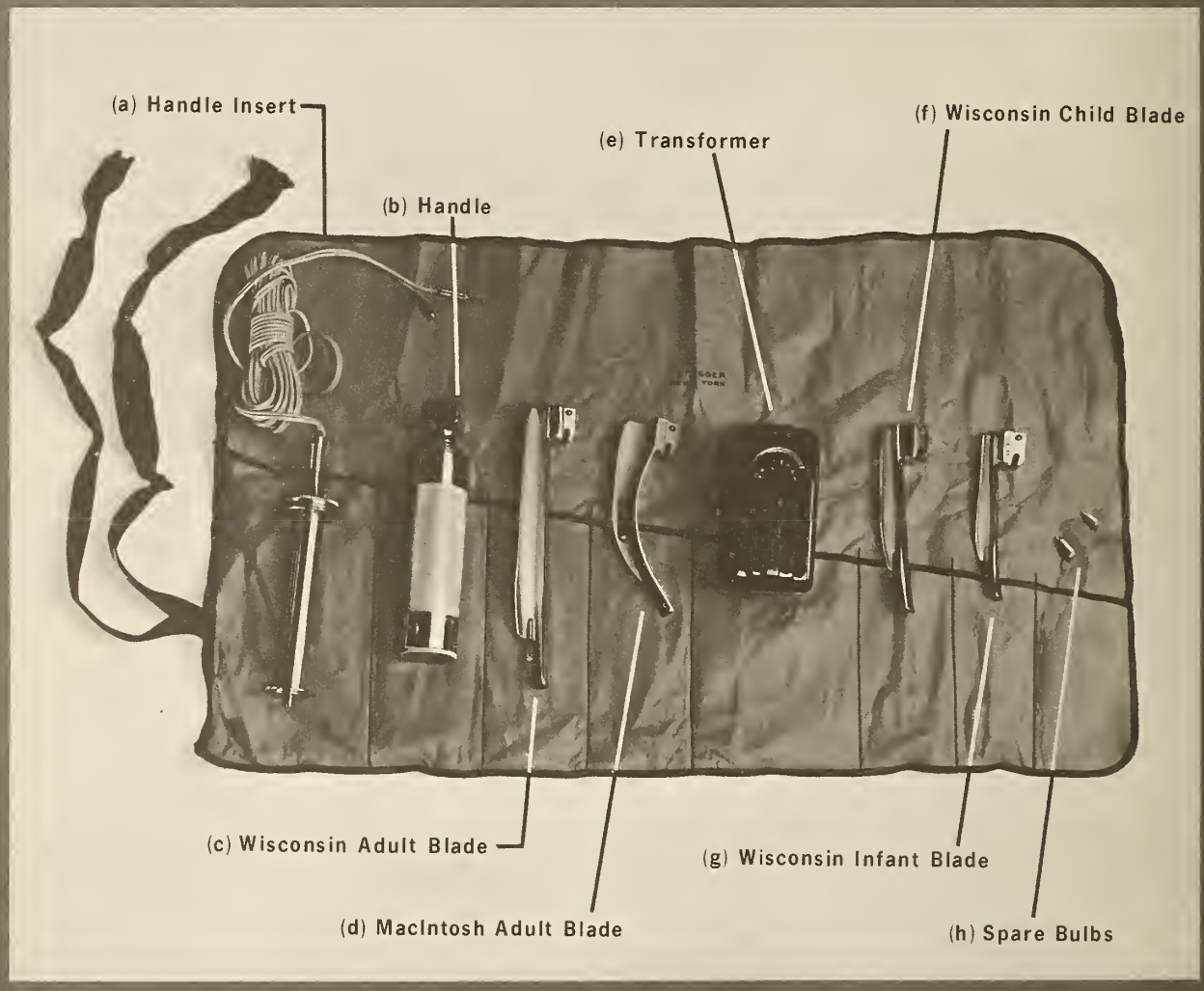
The items pictured and listed in this section will most often be used in connection with anesthesia equipment and operating room procedures. They are packed with the Anesthesia Apparatus, Federal Stock Number 6515–000–0222. Each of the pictured items carries its own stock number. Listed below are the names, descriptions, and stock numbers of this equipment.

(a) Laryngoscope, Infant-Child-Adult	6515-000-0259	
(b) Airways, Plastic, Medium and Small	6515-000-0202	
(c) Airway, Pharyngeal, Rubber, Large	6515-300-2900	
(d) Catheter, Endotracheal	6515-000-2090, 6515-000-0286, 6515-000-0282, 6515-299-8542	6515-000-0288, 6515-000-0284, 6515-000-0280,
(e) Catheter, Murphy, Nasal	6515-000-0298, 6515-000-0296	6515-000-0297,
(f) Catheter, Aspirating	6515-000-0293, 6515-000-0295	6515-000-0294,
(g) Cuff, Catheter	6515-000-0291,	6515-000-0292
(h) Connectors, Straight, Various Sizes	6515-000-0210, 6515-000-0215, 6515-000-0218,	6515-000-0214, 6515-000-0216, 6515-000-0220
(i) Forceps, Endotracheal	6515-332-3300	

LARYNGOSCOPE

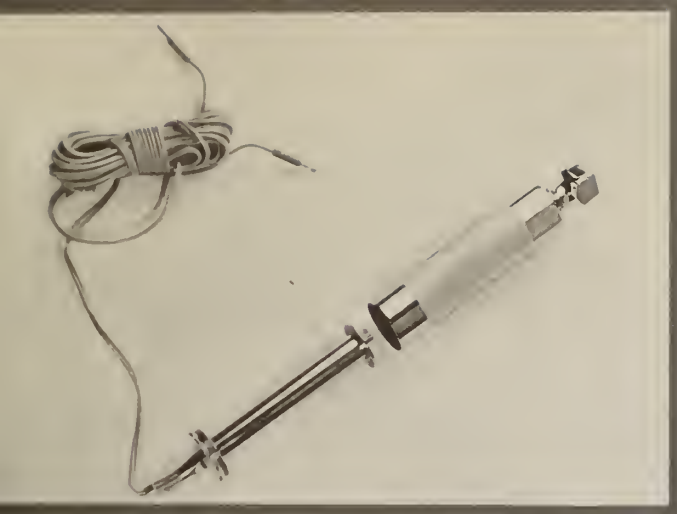
STEP 1:

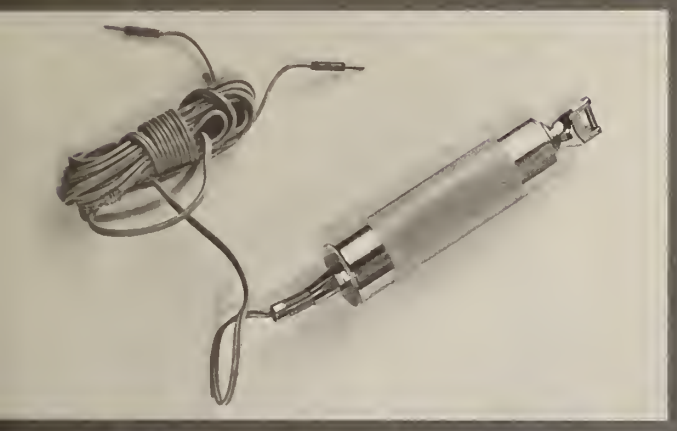
A. Unpack components which consist of: (a) handle insert for electrical use, (b) handle assembly, (c) Wisconsin adult blade, (d) MacIntosh adult blade, (e) transformer for electrical use, (f) Wisconsin child blade, (g) Wisconsin infant blade, (h) spare bulbs for blades.

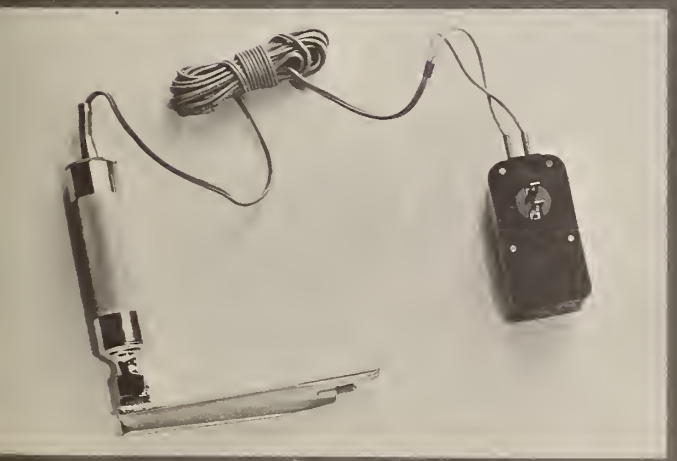


STEP 2:

A. To use with batteries (cordless), unscrew end plug of handle (b), insert two Size "D" dry cells, Federal Stock Number 6135–542–6216, and replace plug. See Step 3.







ALTERNATE STEP 2:

A. To use electrically, remove end plug of handle (b) and set aside. Replace with handle insert with cord (a).

B. Screw plug attached to insert (a) into threaded end of handle (b).

C. Insert the two knurled contacts on cord (a) into holes in top of transformer (e).

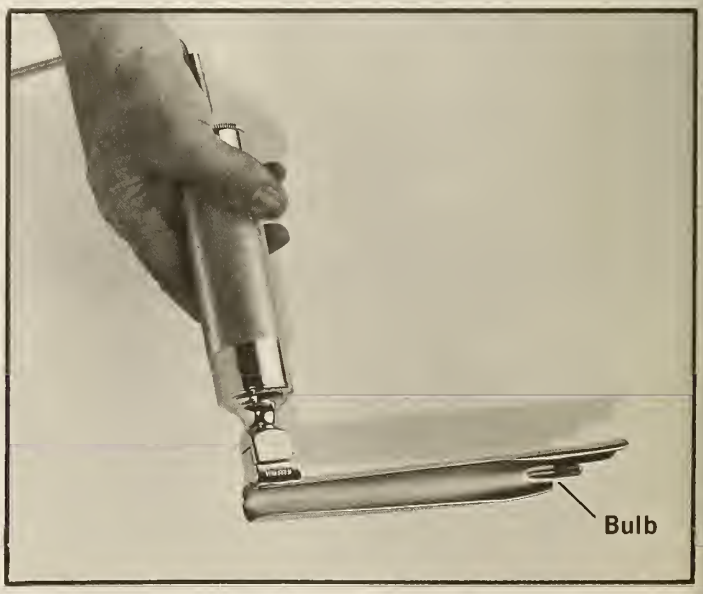
D. The prong assembly on the back of the transformer (e) is adjustable. Hold the transformer in a vertical position and adjust the prongs to fit the wall socket where it will be connected.

STEP 3:

A. To insert blade (c), (d), (f), or (g), hook lip of blade over pin on handle assembly (b).

B. Push down on blade and press forward. Blade will lock into place.

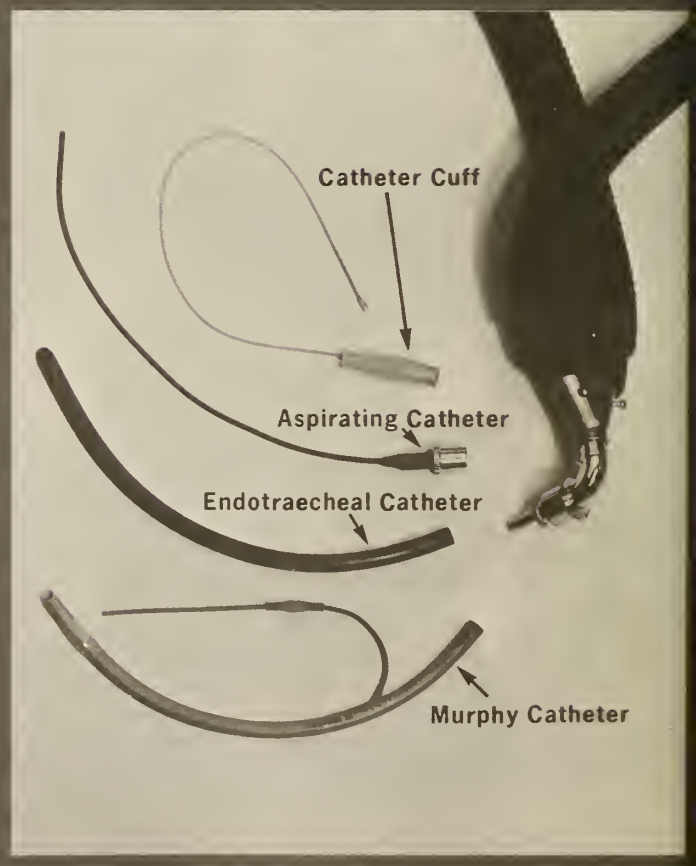
C. With either batteries or electrical power, bulb at end of blade should glow when blade is attached to handle. If it does not, replace with another blade; if bulb glows on this blade, first bulb was defective and should be replaced with spare bulb (h). When battery operated, if bulbs will not glow, replace cells with fresh, dry cells.



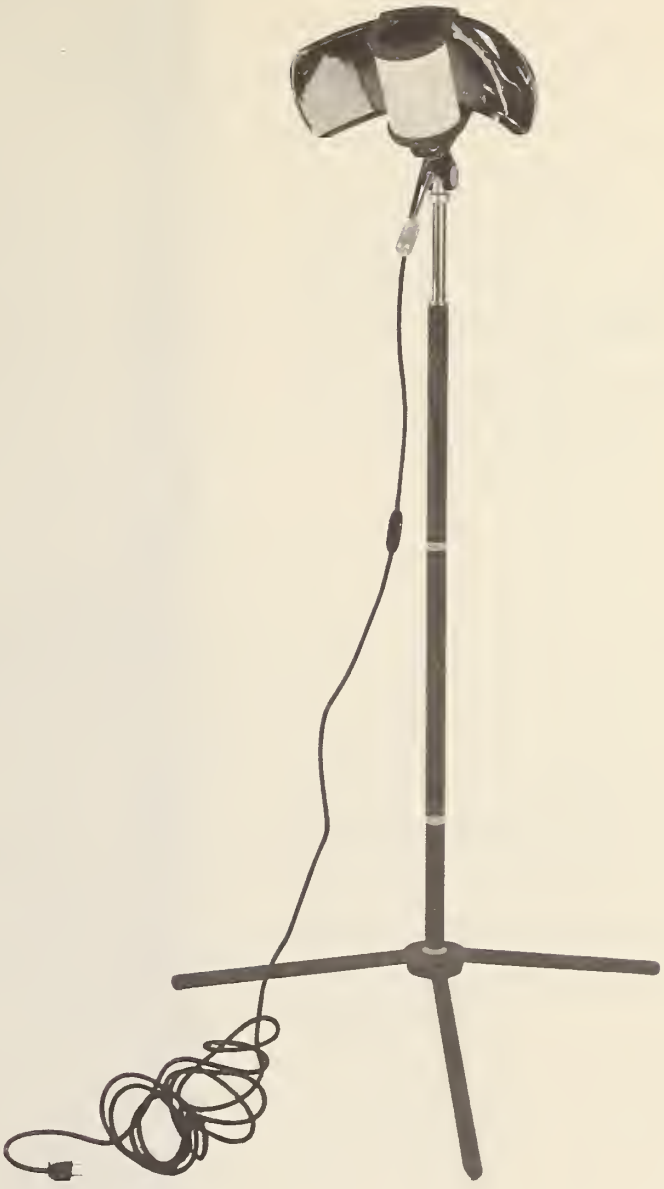
ENDOTRACHEAL TUBES AND ASSOCIATED EQUIPMENT

A. Remove face mask from elbow adapter on anesthesia apparatus. Insert connector (h) sized to fit tube (d) intended for use. All connectors fit snugly into large end of elbow adapter.

B. Insert tube to be used over end of connector. Use as directed by physician or other medical personnel.



DENTAL OPERATING LIGHT



FEDERAL STOCK NUMBER: 6520-538-7100

FEDERAL NOMENCLATURE: LIGHT, DENTAL OPERATING, FIELD TYPE

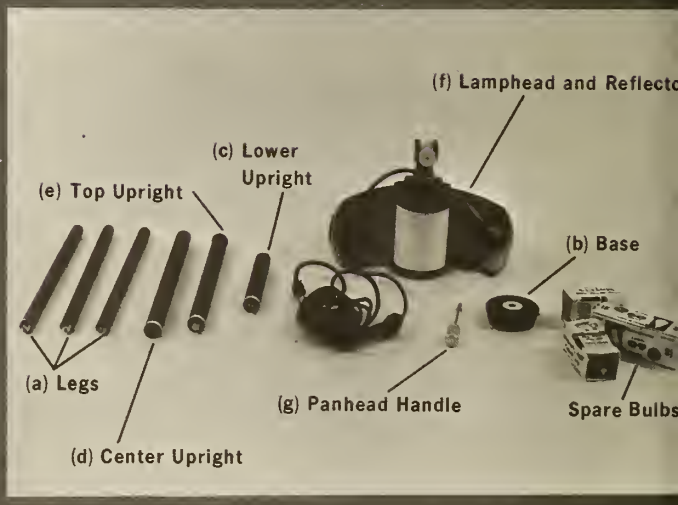
HOSPITAL SERIES: 62000 AND SUPPLY ADDITIONS

This lamp is for use on 24 and 110 volts, AC or DC. When electricity is not available the lamp may be operated by connecting two 12-volt batteries in series. An electrician or other qualified person will be required to connect the lamp to the batteries. When the lamp is battery operated, use the 24-volt bulb packed with the lamp.

STEP 1:

A. Open fiberboard carton by slitting tape with any sharp instrument. Lamp parts are packed in an inner carton. It is not necessary to remove the inner carton to gain access to components.

B. Lamp parts include (a) legs, (b) base, (c) lower upright, (d) center upright, (e) top upright, (f) lamp and reflector unit, and (g) pan-head handle. Spare bulbs are also included.



STEP 2:

A. Screw legs (a) into base (b) to form tripod stand.

STEP 3:

A. Screw lower upright (c) into hole in top of base (b).

STEP 4:

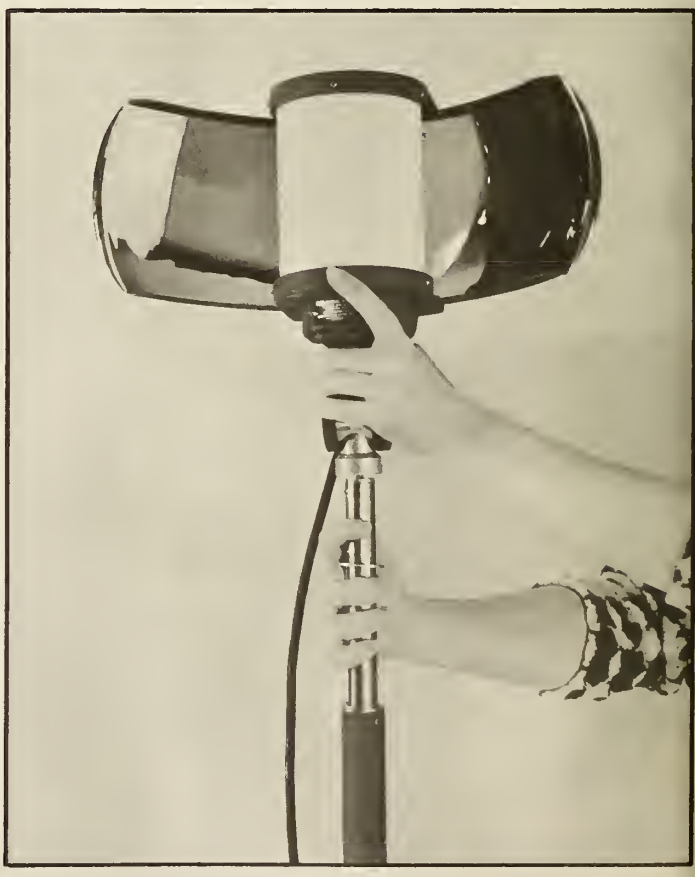
A. Screw center upright (d) into lower upright (c).

STEP 5:

A. Screw top upright (e) into center upright (d). Top upright (e) contains a chrome extension with a lock nut which will hold the lamphead in desired position.

STEP 6:

A. Raise the chrome extension on top upright (e) several inches, releasing the lock nut-loosen by pressing upward on nut. Screw lamphead (b) into position by rotating chrome portion of top upright (e) inside of lamphead shaft until tight.



STEP 6: (CONTINUED)

Lock chrome extension holding lamphead by pressing lock nut against rim of upright (e).

STEP 7:

A. Screw pan-head handle (g) into hole on lamphead unit (b). Tilt of the lamphead is controlled by twisting the pan-head handle counterclockwise to release. Tilt lamphead to desired position and lock by a clockwise twist of pan-head handle.

TO BE OBTAINED LOCALLY:

(When electricity is not available)
Two 12-volt automobile batteries, power clips, jumper, conductor cord, female receptacle.

SURGICAL LIGHT

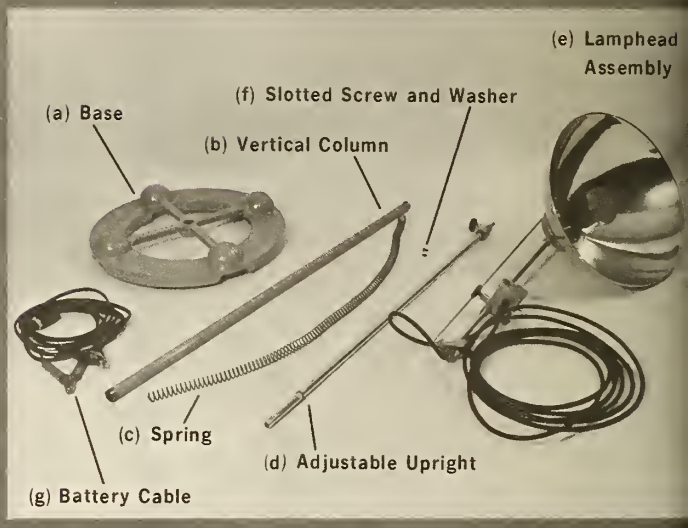
FEDERAL STOCK NUMBER:	6530-781-3719 (6530-000-0244)
FEDERAL NOMENCLATURE:	LIGHT, SURGICAL STAND
HOSPITAL SERIES:	62000

This lamp may be used either with 110-volt, AC or DC current or with a 12-volt automobile battery obtained locally. 12-volt bulbs are packed with the lamp.

STEP 1:

A. Cleated plywood box containing components may be opened with hammer and screwdriver or other suitable tool found in the PDH toolbox.

B. Remove components which consist of: (a) base, (b) vertical column, (c) spring, (d) adjustable upright, (e) lamphead assembly, (f) slotted screw and washer, and (g) battery cable. Bulbs are also included.



STEP 2:

A. Screw vertical column (b) into base (a). Casters are already attached to base.

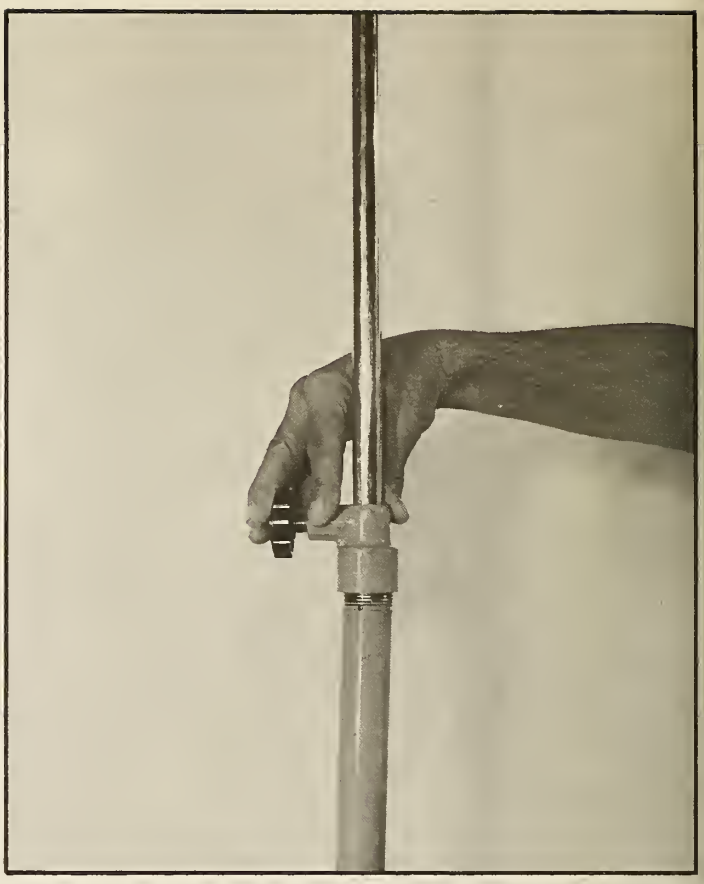
STEP 3:

A. Thread spring (c) into vertical column (b) as far as it will go without tightening the coils.

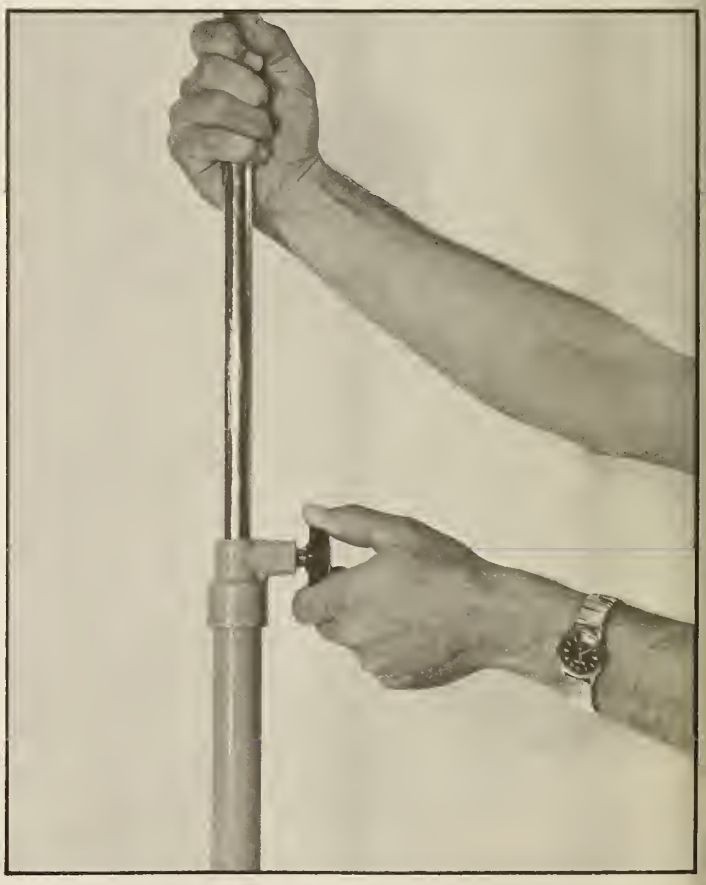
STEP 4:

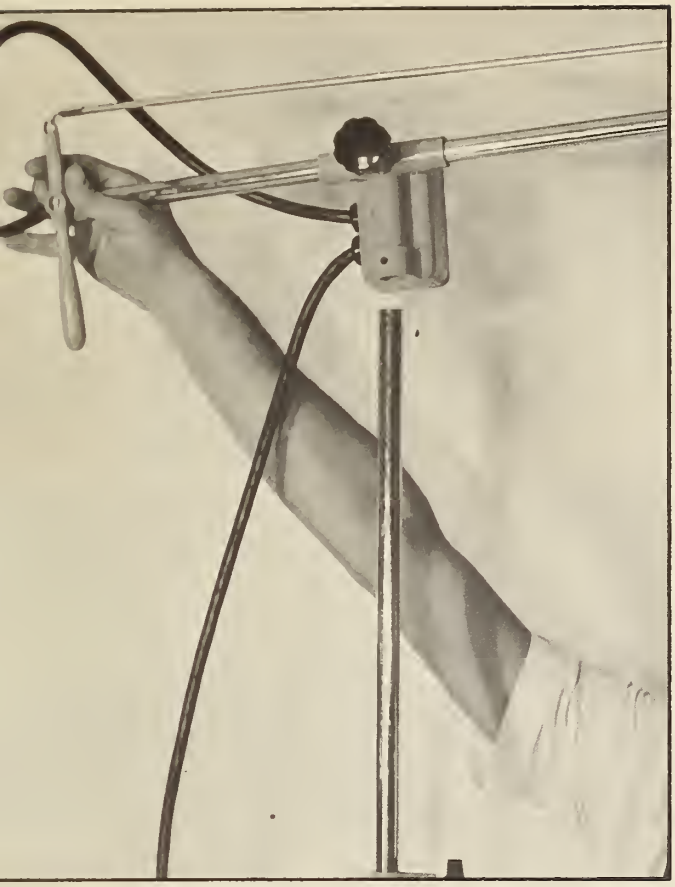
A. Insert adjustable chrome upright (d) into vertical column (c). If necessary, loosen knob assembly and slide it upward in order not to create excessive tension on spring as chrome upright is inserted. Retighten knob if it is loosened.

B. Screw knob assembly on adjustable chrome upright (d) over threads on vertical column (c).



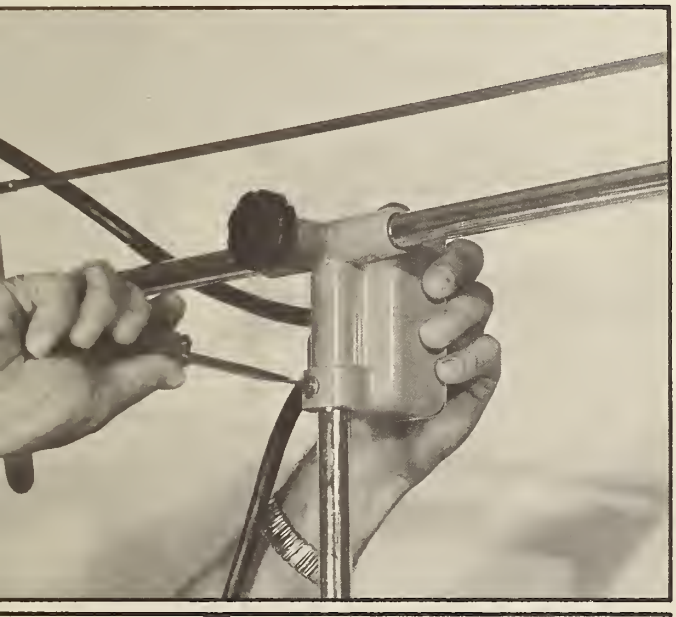
C. Loosen knob on chrome upright (d) and firmly push downward on upright (d), depressing spring (c) into column (b). Tighten knob immediately so that taut spring will not force chrome upright upward, possibly causing damage or injury.

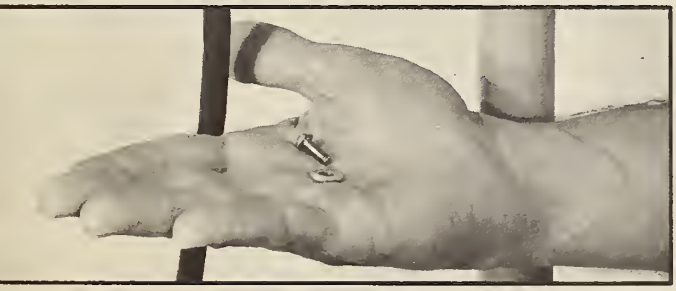




STEP 5:

A. Lift lamphead assembly (e) and place over chrome upright (d).





STEP 6:

A. Rotate lamphead assembly (e) until screw hole on side of assembly matches hole in chrome upright (d). Place screw over washer (f) and tighten with screwdriver. This will hold lamphead securely in place.

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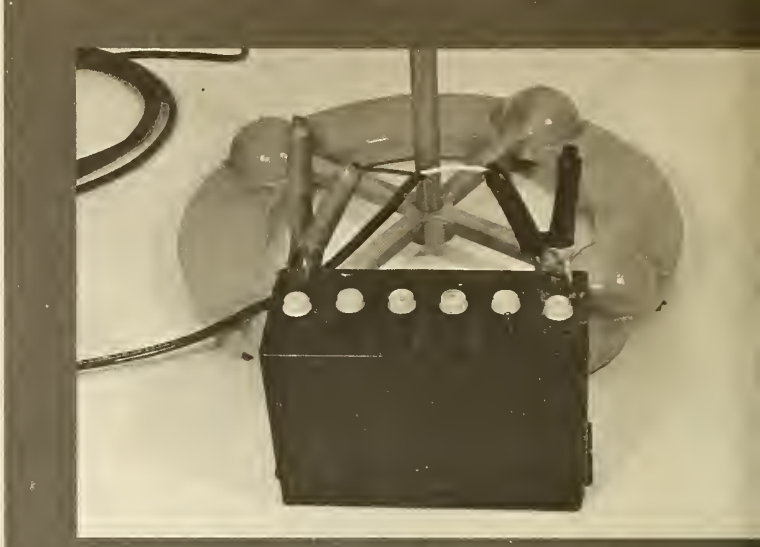
STEP 7:

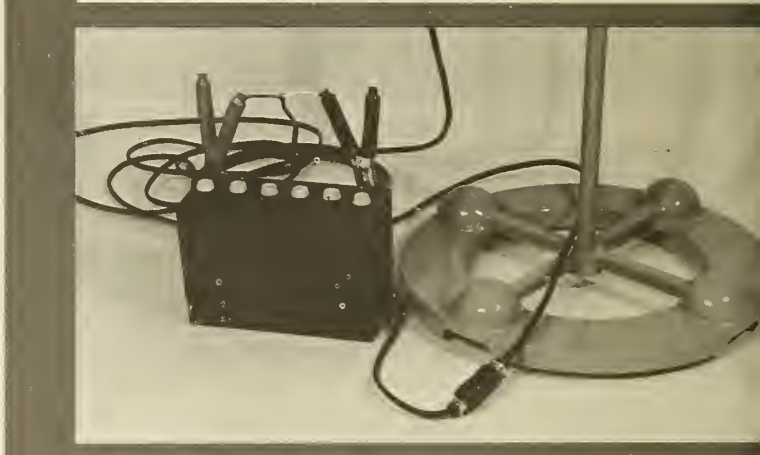
A. When using 12-volt battery connect battery cables (g) to battery.

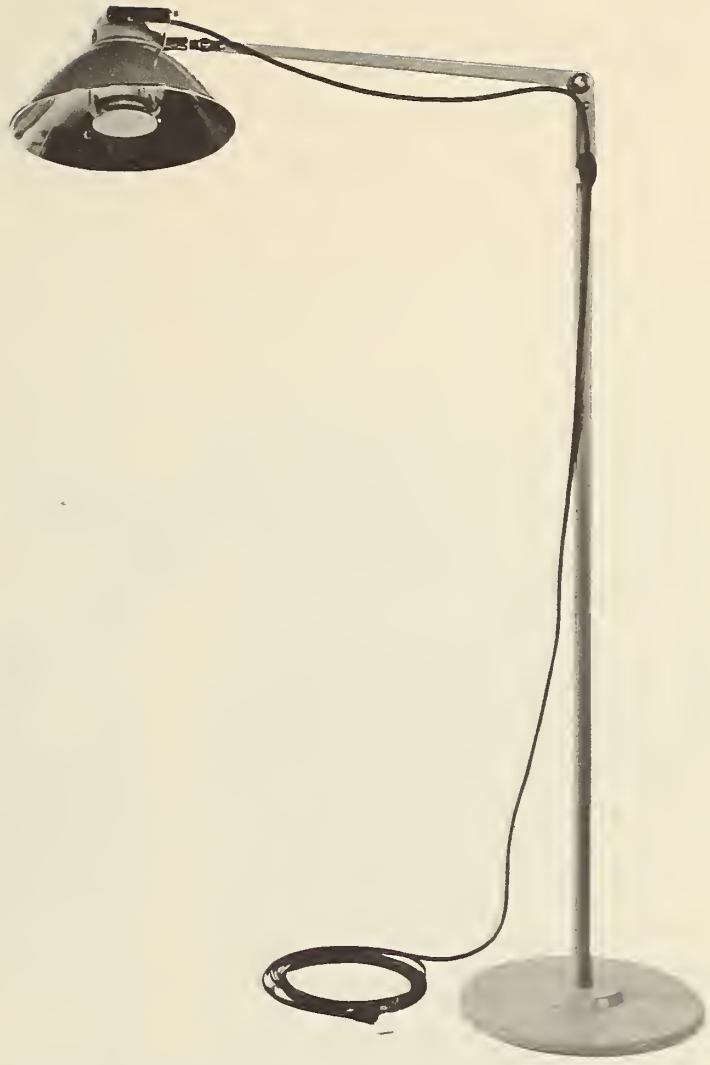
B. Connect socket on lamp to that on battery cable (g).

TO BE OBTAINED LOCALLY:

(When electricity is not available)
12-volt automobile battery.







SURGICAL LIGHT

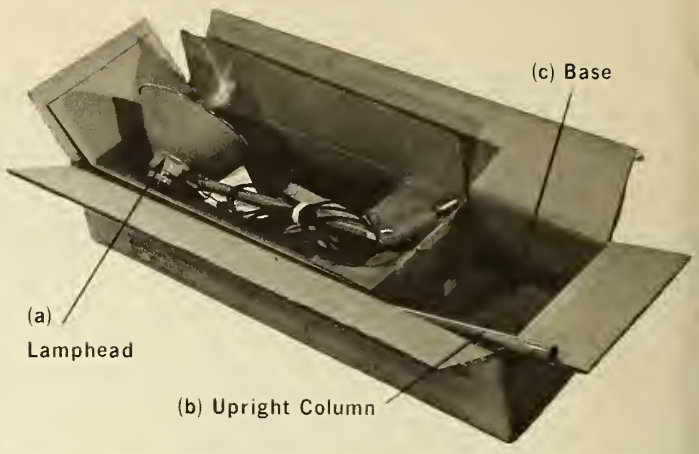
Operating and Examining

FEDERAL STOCK NUMBER:	6530-042-6342 (6530-000-0247)
FEDERAL NOMENCLATURE:	LIGHT, SURGICAL STAND, OPERATING AND EXAMINING
HOSPITAL SERIES:	62000

An easy-to-assemble lamp, this one consists of only three parts—the lamphead assembly, the upright column, and the base. The lamp may be operated with a 12-volt automobile battery when connected by an electrician or other qualified person. . . . 12-volt bulbs are packed with Surgical Light, Federal Stock Number 6530–781–3719.

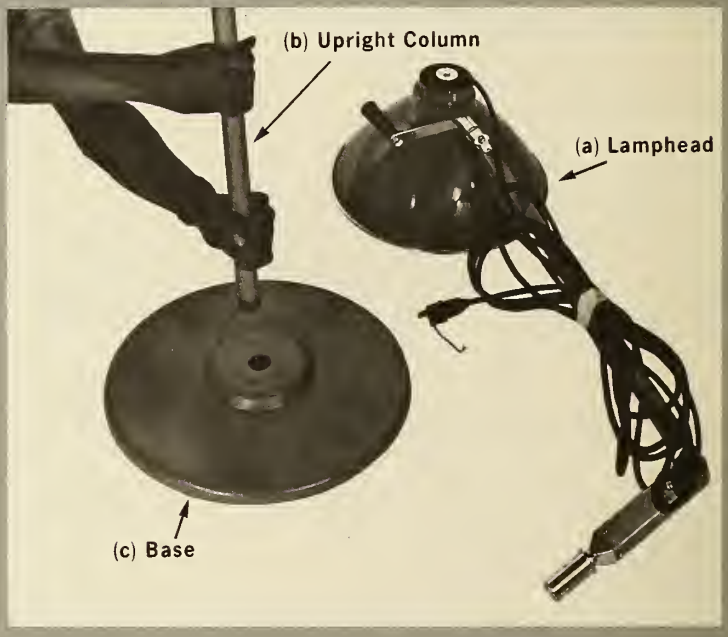
STEP 1:

A. Slit tape on tri-wall carton with knife or other sharp instrument. Lamphead assembly (a) is packed in an inner carton. Also easily accessible are the upright column (b) and base (c).



STEP 2:

A. Place base (c) on floor. Screw threaded end of upright column (b) into base.



STEP 3:

A. Drop chrome stud on lamphead assembly (a) into top of upright column (b). Handle on top of reflector to be used in adjusting position of lamphead.

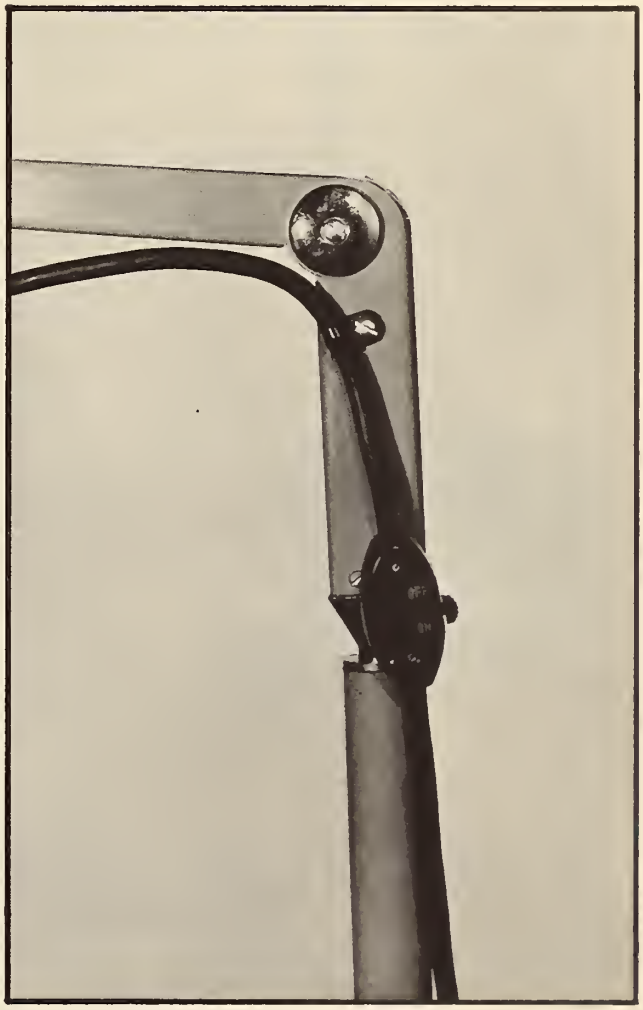
STEP 4:

A. Lamp cord is fitted with adapter for two-prong outlet. If a three-prong outlet is used, remove adapter and plug into outlet.

B. If used with two-prong outlet, be sure to ground. A forked ground connector is attached to the adapter. Loosen screw on outlet cover plate and slide connector under screw. Tighten screw.

STEP 5:

A. After plugging into outlet, check lamp by flipping switch to "ON" position. Turn "OFF" until needed.

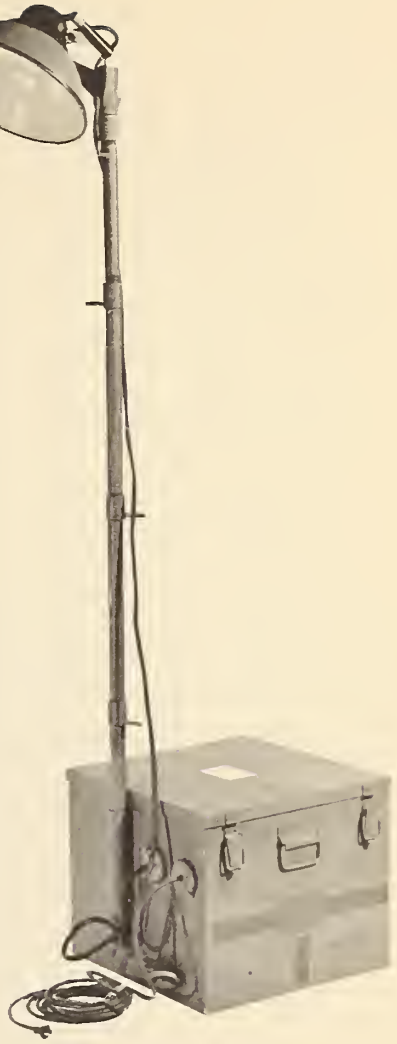


TO BE OBTAINED LOCALLY:

(When electric power is not available) 12-volt automobile battery, power clips, conductor cord, and receptacle.

SURGICAL LIGHT

Field



FEDERAL STOCK NUMBER: 6530-706-6325

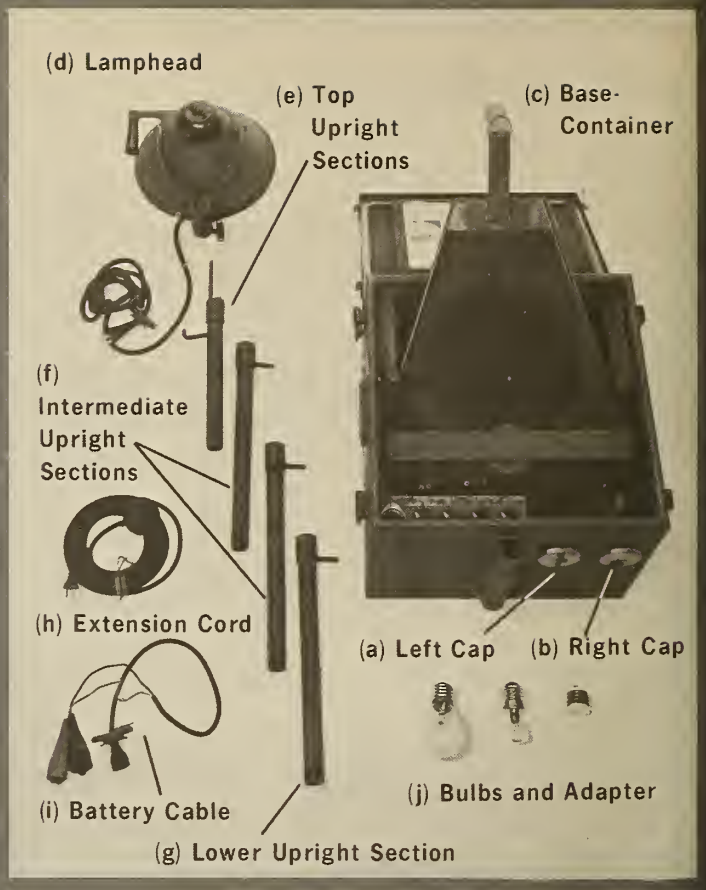
FEDERAL NOMENCLATURE: LIGHT, SURGICAL, FIELD, 110\220V., AC-DC OR BATTERY OPERATED.

HOSPITAL SERIES: 56000

This lamp is found predominately in 56000 Series Hospitals, however, it will be packed occasionally in another Series as a replacement item. Ordinarily the lamp will be packed in a wooden crate which may be opened with a clawhammer and screwdriver or crowbar found in the PDH toolbox. The metal case in which the lamp is enclosed will be wrapped in a waterproof liner. When battery operated, a 6-volt automobile battery must be procured. Bulb is included in case with lamp.

STEP 1:

A. All parts of the lamp are packed inside the carrying case which also serves as a base for the lamp. No batteries are included. The lid holds a spare lens for the lamphead and instructions for use with a 6-volt battery. Parts and other information necessary for assembly instructions include: (a) left cap on base, (b) right cap on base, (c) base-container, (d) lamphead and cord, (e) top upright section, (f) interchangeable intermediate upright sections, (g) lower upright section, (h) extension cord for 110-volt outlet, (i) 3-foot battery cable, (j) bulbs and adapter.



B. To release lamphead assembly (d), press button on overhead bracket of case and lift up.

C. Remove four pieces of pipe which form upright shaft (e, f, g). Grasp semicircular metal loop attached to hinge in rear of case. Pull forward to release shelf on which lamphead (d) rests. Carefully lift lamphead from case to prevent scarring or breaking of lens.

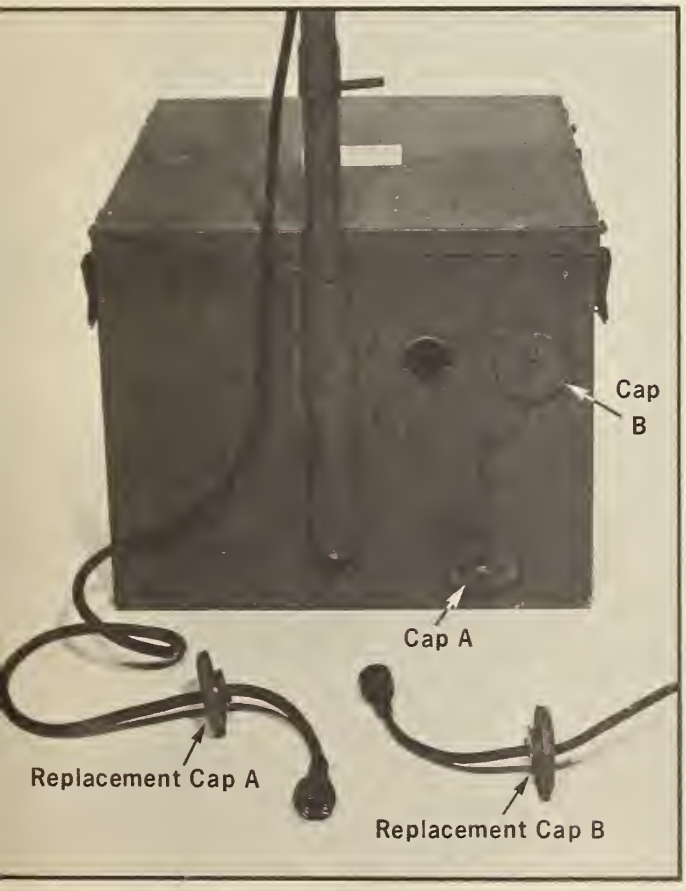
STEP 2:

A. Insert lower section of upright (g) into bracket on front side of base. Then screw intermediate upright sections (f) into lower upright (g). The two intermediate uprights are interchangeable.

B. Screw top section of upright (e) into second section of upright (f). Top section (e) is easily identified by the chrome-plated lamphead connector on top.

STEP 3:

A. Place lamphead (d) on upright (e). Tighten knob on lamphead to secure in position.



STEP 4:

A. Twist caps (a) and (b) on front of base to loosen. They will hang from chains attached to base and may be replaced when lamp is dismantled. Insert cord attached to lamphead (d) into left hole (a) in base. Replace cap (a) with cap attached to cord (d).

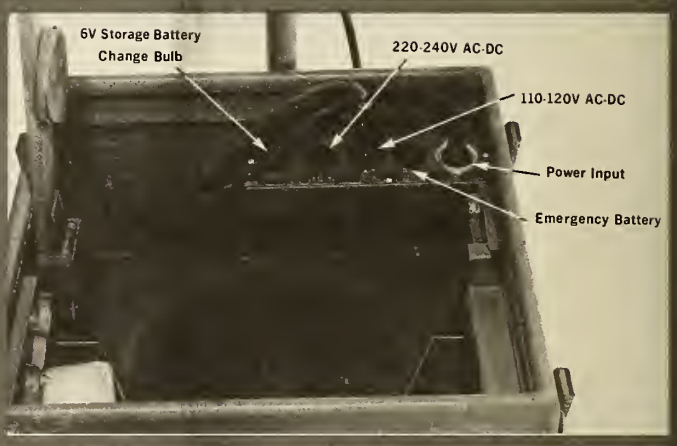
B. Insert extension cord (h) into right hole (b) on base. Replace cap (b) with cap on extension cord (h).

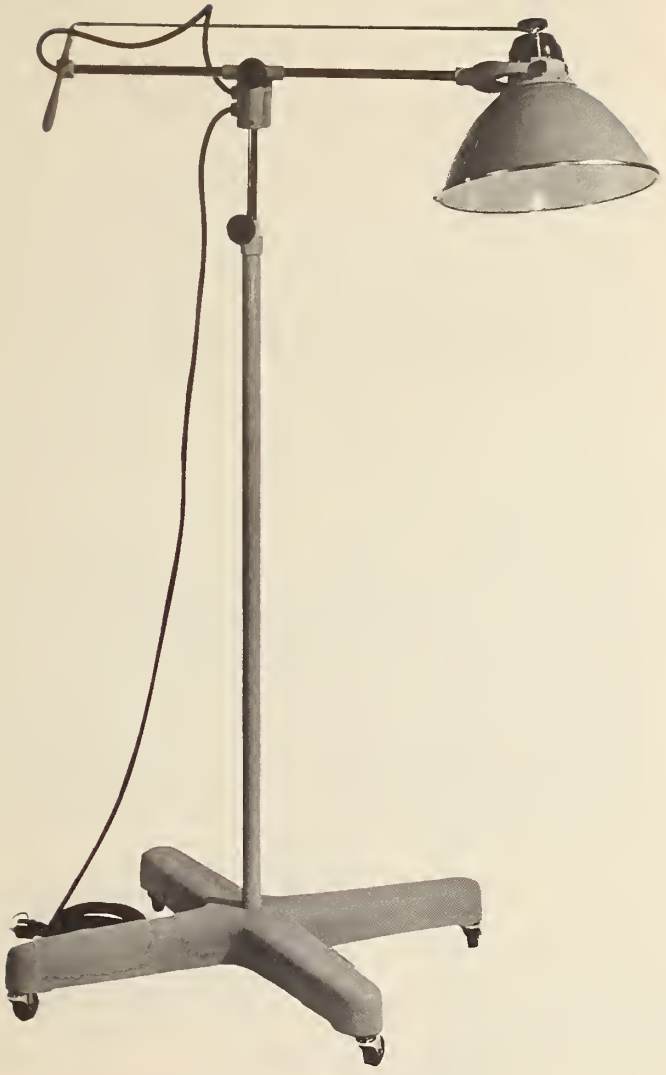
C. With base lid open, pull lamp cord (d) and extension cord (h) through holes (a) and (b). Plug lamp cord extending through hole (a) into socket marked "110 volts AC–DC." Plug the extension cord extending through hole (b) into "Power Input" receptacle. Lamp is now ready for electrical operation.

Clear, concise instructions for operation with a 6-volt battery are contained in the lid of the case along with a spare lens for the lamphead. Six-volt bulb (j) and battery cable (i) will be used only when lamp is battery operated.

TO BE OBTAINED LOCALLY:

(When electric power is not available) 6-volt automobile battery.





SURGICAL LIGHT

Enclosed Dome

FEDERAL STOCK NUMBER:	6530-706-6475
FEDERAL NOMENCLATURE:	LIGHT, SURGICAL STAND, ENCLOSED DOME
HOSPITAL SERIES:	54000, 55000, 57000

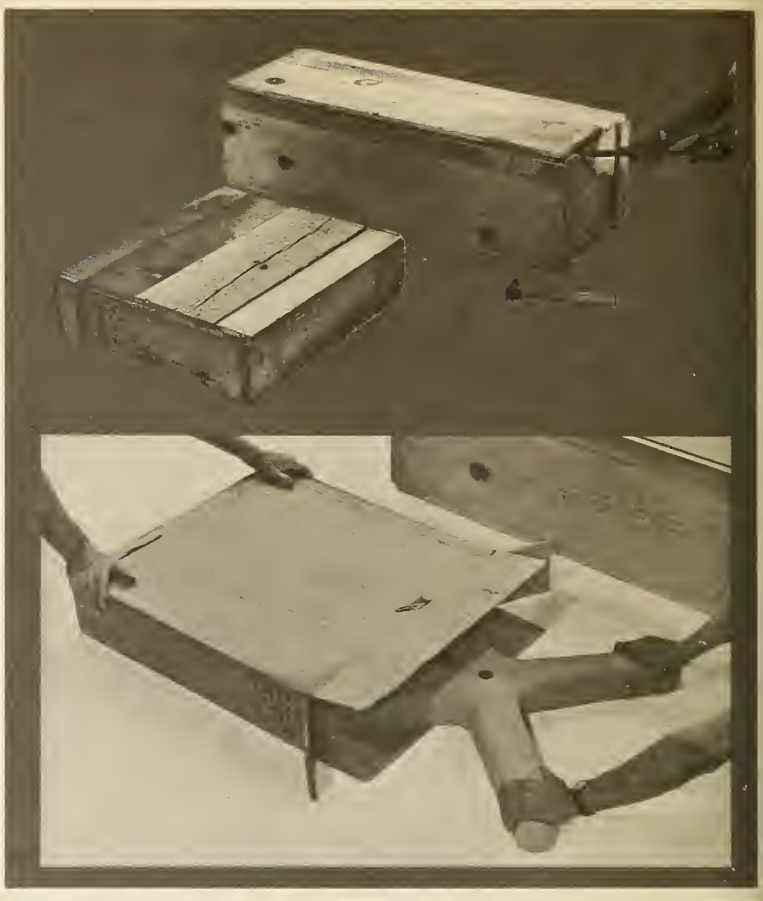
This light is sometimes packed in two cleated plywood boxes—at other times in three. Inside the wooden boxes are fiberboard cartons. The base is exceptionally heavy for its size and is most easily handled by two people as shown in the photographs. An electrician or other qualified person can easily connect this lamp to a 12-volt battery procured locally. If a battery is used, 12-volt bulbs must also be obtained. None are packed with the lamp or in Series 54000, 55000, or 57000 hospitals.

STEP 1:

A. Open wooden boxes with hammer and crowbar.

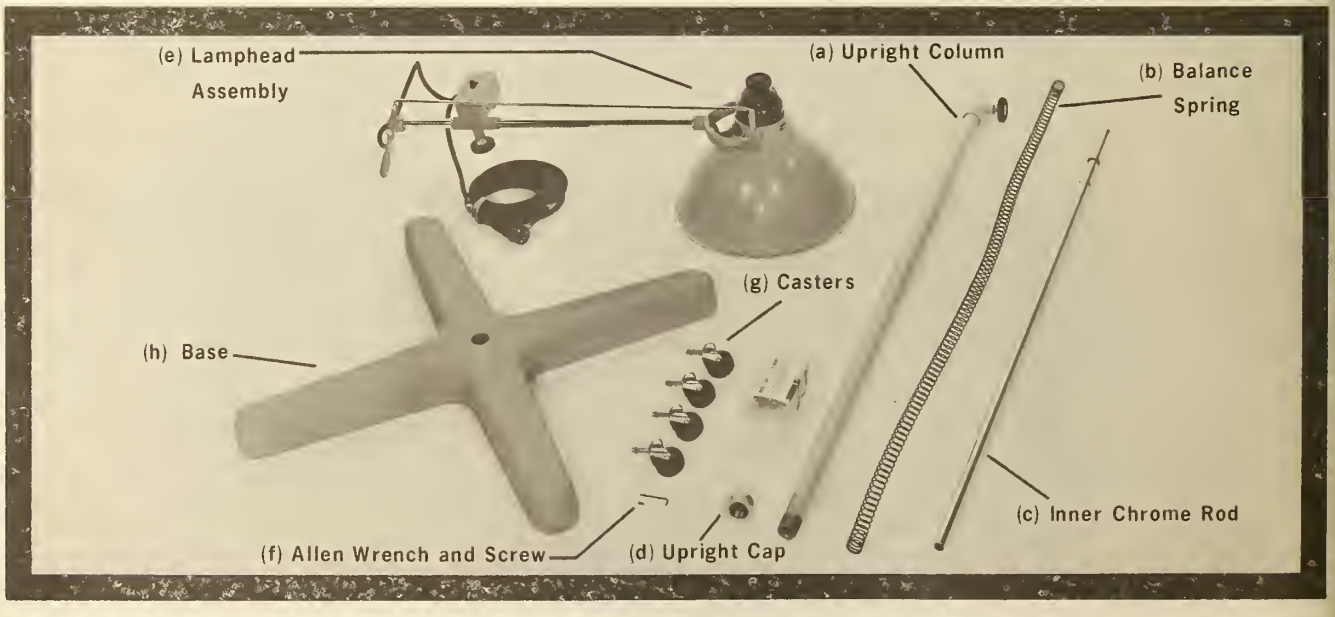
B. Remove fiberboard cartons from boxes. It will probably be necessary to turn the box containing the base upside down because of its weight.

C. Remove packing carefully—small parts and light bulbs will be included with the main lamp parts and may be lost or broken if care is not exercised. Casters are included in box containing base.



STEP 2:

A. Lay components out. They will include: (a) upright column, (b) balance spring, (c) inner chrome rod with washer, (d) upright cap, (e) lamphead assembly, (f) allen wrench and screw, (g) casters, and (h) base.



STEP 3:

A. Loosen knob on upright (a).

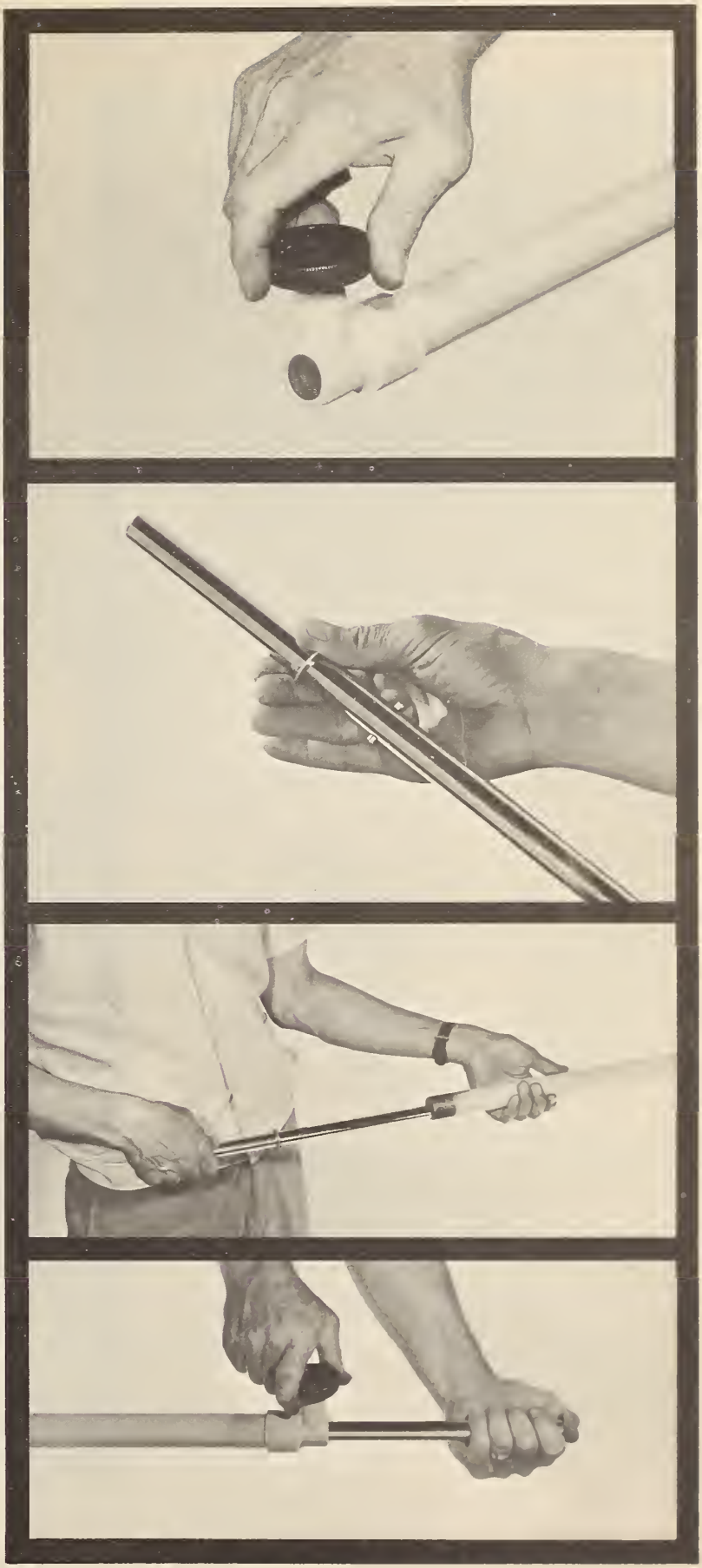
STEP 4:

A. Place washer over end of inner chrome rod (c) nearest retainer pin. Washer should rest on pin. If washer is taped to rod, remove tape.

STEP 5:

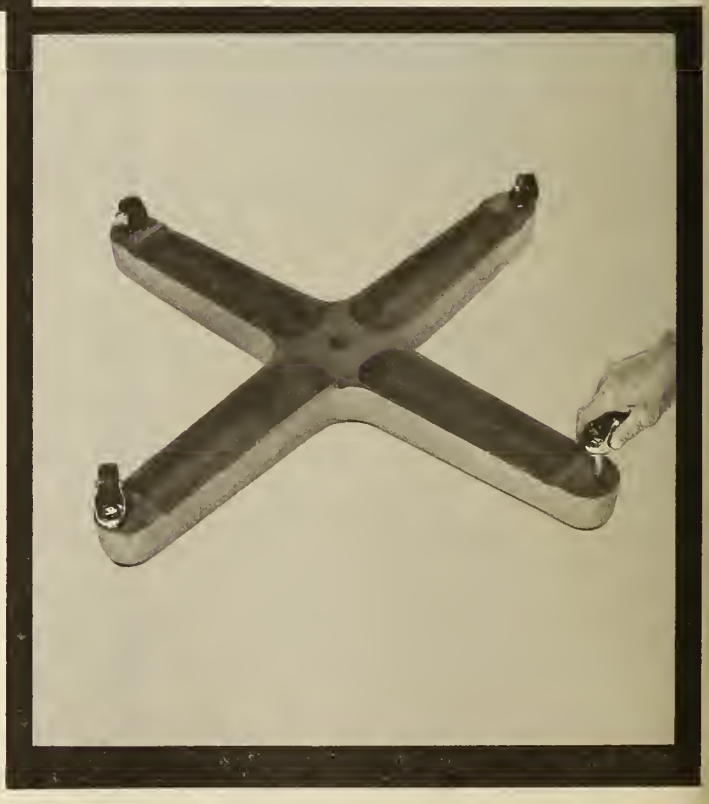
A. Insert inner rod (c) into upright (a), washer end last.

B. Allow inner rod (c) to extend through upright (a), as far as possible. This is important since dangerous tension may result later when spring is inserted if it is tightly coiled. Tighten knob to hold temporarily in place.



STEP 6:

A. Insert spring (b) into upright (a) over inner rod (c).



STEP 7:

A. With base (h) upside down or on its side, insert casters (g) by pushing each into slot until locked into position. No tools or washers are needed.

A.

B.

STEP 8:

A. Allow end of upright with spring protruding to fall through hole in base. This is best accomplished with base standing on side.
Photo in this case is for clarification only.

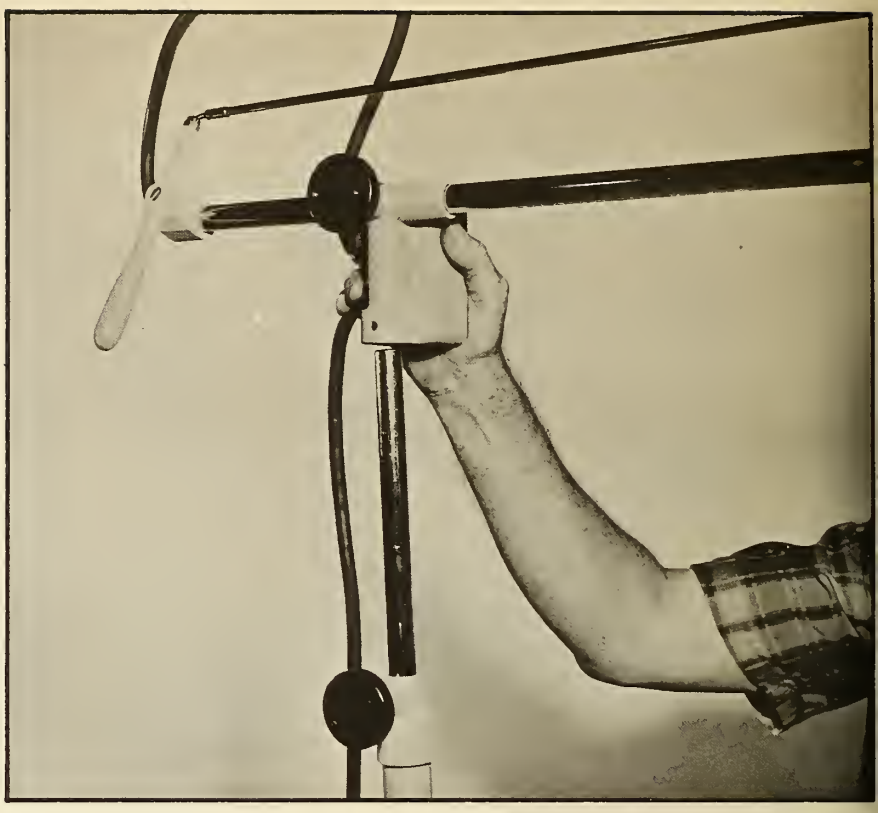
B. Place cap (d) over spring (b) and press carefully toward end of upright (a), extending through hole in base (h).

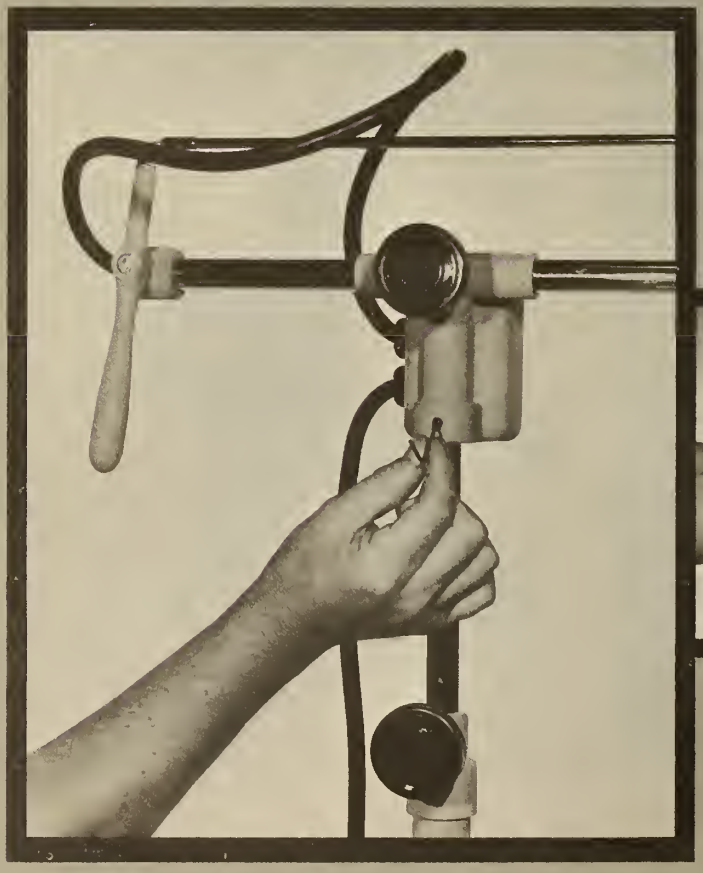
C. Screw cap (d) securely in place. Set base (h) upright.

C.

STEP 9:

A. Loosen knob on upright (a). This will allow movement of chrome rod (c). Extend rod (c) upward about a foot. Tighten knob. Drop lamphead assembly (e) over chrome rod (c).



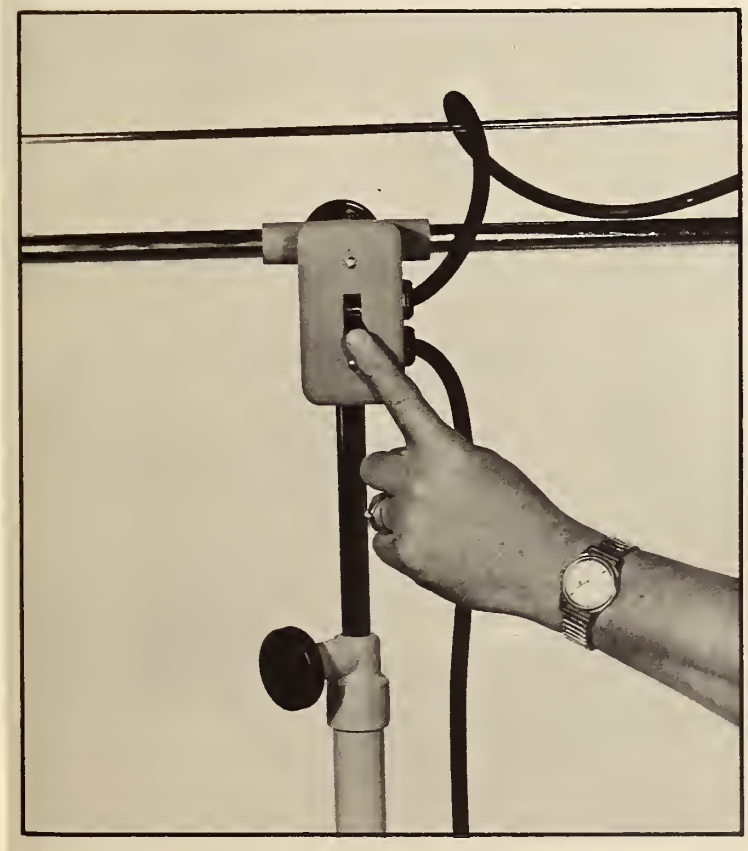


STEP 10:

A. Line up hole in base of lamphead assembly (e) with hole in chrome rod (c).

B. Insert allen head screw (f) into hole and tighten with allen wrench (f).

C. Lamphead may be moved backward and forward by loosening knob on base of lamphead assembly (e). Knob must be immediately tightened when lamp is in desired position.



STEP 11:

A. Test lamp by placing switch in "ON" position. Turn "OFF" until lamp is to be used. For grounding of plug, see page 73, Step 4.

TO BE OBTAINED LOCALLY:

When needed, a 12-volt automobile battery, power clips, conductor cord, receptacle, and 12-volt bulbs.

POLE LITTER AND SUPPORT

FEDERAL STOCK NUMBERS:	**LITTER—6530-000-0001;** **SUPPORT—6530-660-0034**
FEDERAL NOMENCLATURE:	**LITTER, FOLDING, RIGID POLE;** **SUPPORT, LITTER, FOLDING**
HOSPITAL SERIES:	**LITTER—62000, 57000, 56000, 55000, 54000** **SUPPORT—62000 AND SUPPLY ADDITIONS**

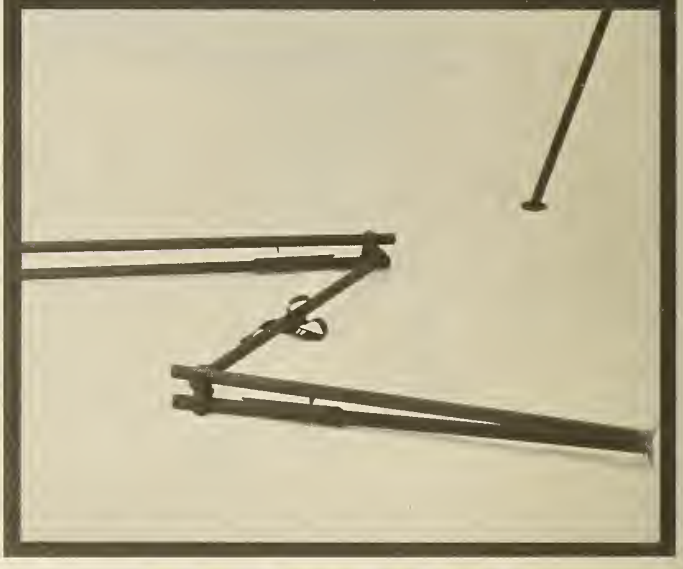
Because these two items will almost always be used simultaneously, they will be treated as a unit for setting-up instructions. Particular attention should be given to the photographs showing positioning of the leg joints on the supports.

TO ASSEMBLE SUPPORTS

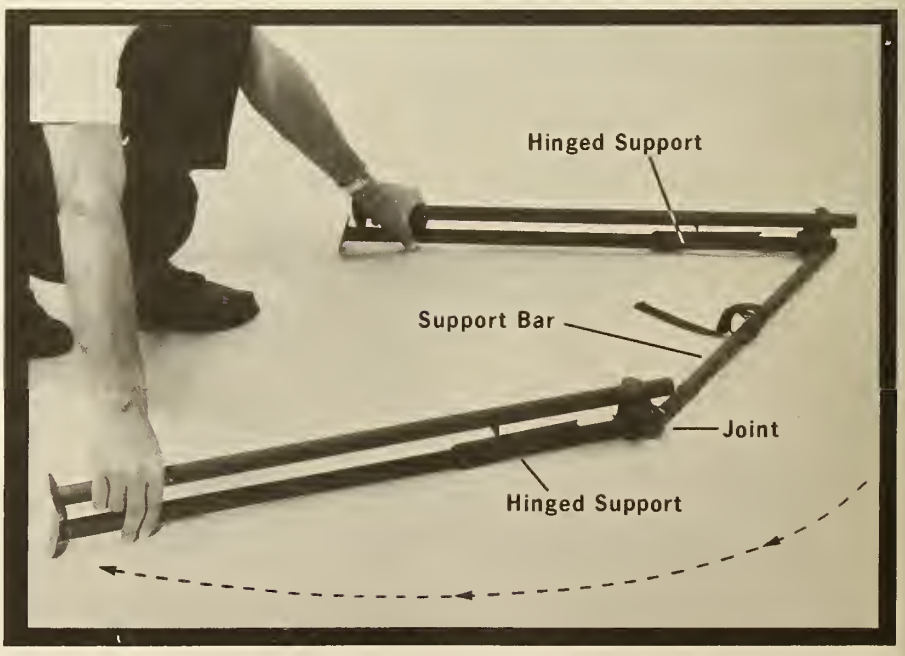
STEP 1:

A. A pair of supports is packed in one triwall fiberboard carton. The supports are most easily removed by slitting the tape on one end of the carton and sliding the supports out.

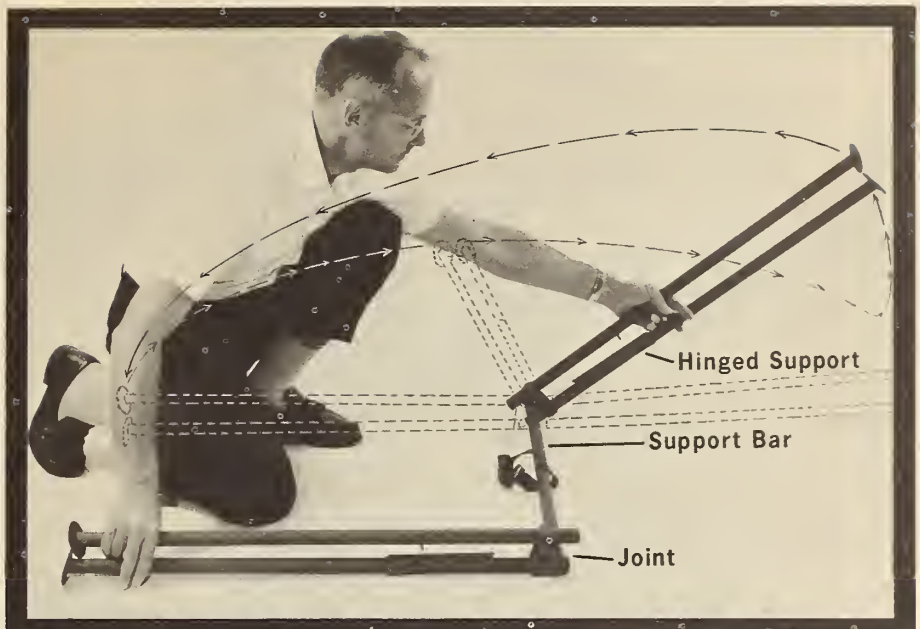
B. Set one support aside and spread the other as shown. Support bar will remain in same position for next three photos illustrating preliminary procedure for setting up legs.



C. Rotate right pair of legs out and around until joint is outside of legs as shown. Note placement of hinged support on legs.



D. Move left legs out, up and over as illustrated by dotted lines in photograph.



Both pairs of legs should now be parallel as shown in illustration.

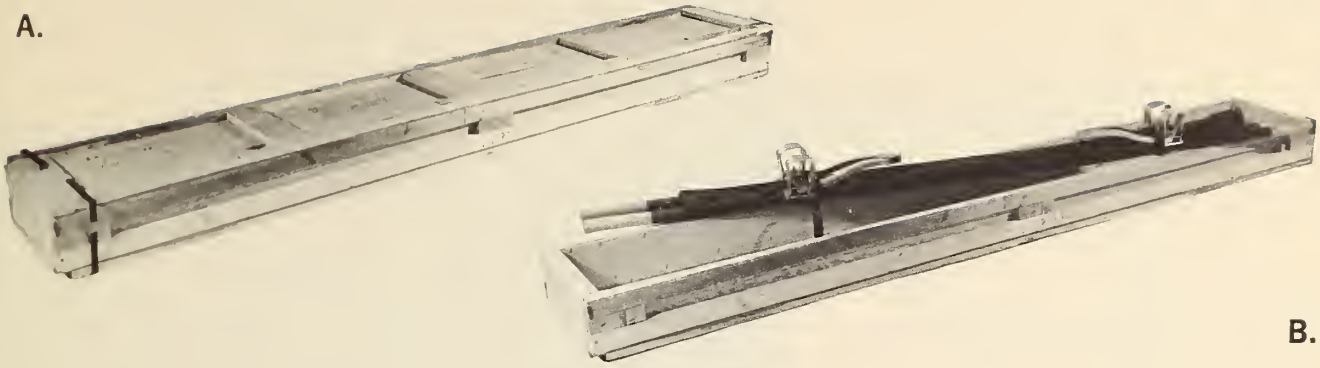
E. Lift and spread legs until support stands.

F. Press brace on leg downward until it catches on retaining bar on opposite leg. Support will not be stable unless hinged braces on both pairs of legs rest directly on opposite bars.

G. When viewed from the side, each pair of legs should be positioned as shown in photo.

Overhead view should be as shown. Assemble second support in identical manner.

A.



B.

STEP 1:

A. Litter is packed in cleated plywood box. Open with wire cutters, screwdriver and hammer, or other tools found in PDH toolbox.

B. Remove packing and lift litter from box.

C. Unbuckle retaining straps on each end of litter.

D. Turn litter canvas side down and spread ends.

TO ASSEMBLE LITTER

C.

D.

E. Pull spreader bar toward one end of litter until it locks in place. Repeat on opposite end. *If tension on spreaded bar is great, do not use hand, as shown. Lock it in place by pressing on bar with foot.*

F. Litter should appear as pictured, canvas side down (f).

G. Turn upright for use as a comfortable emergency floor or ground cot or place on supports as pictured on page 89.

SURGICAL INSTRUMENT STAND

(MAYO)

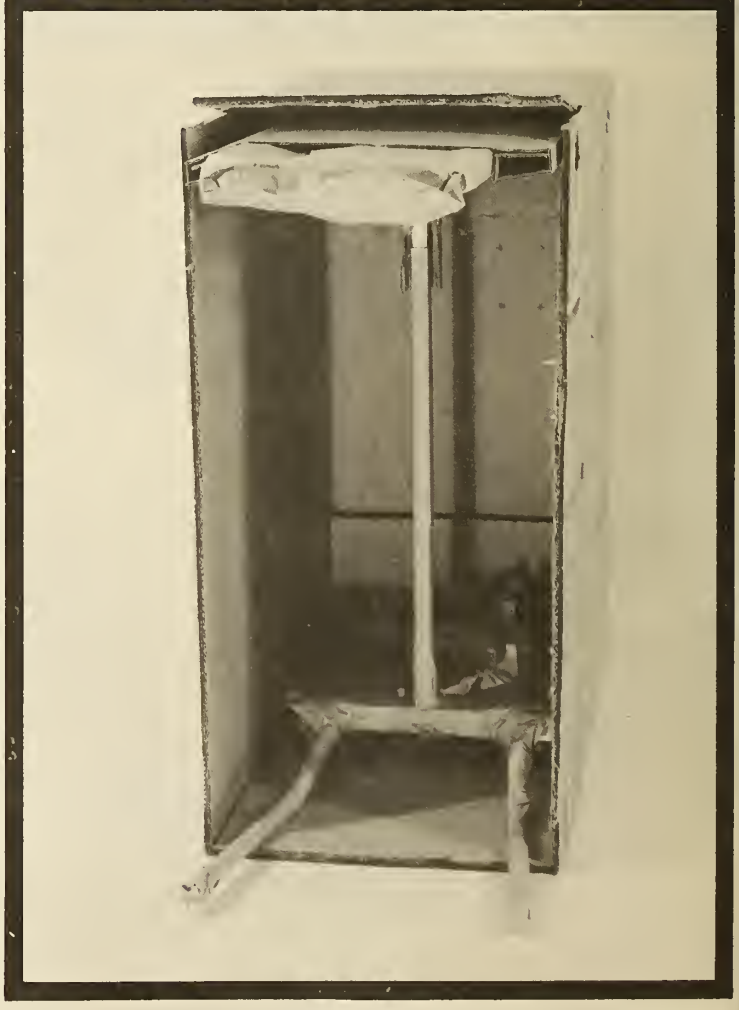
FEDERAL STOCK NUMBER:	6530-708-1610
FEDERAL NOMENCLATURE:	STAND, SURGICAL INSTRUMENT, WITH REMOVABLE INSTRUMENT TRAY
HOSPITAL SERIES:	62000, 57000, 56000, 55000, 54000

No assembly is involved with this stand. These photographs were made specifically to explain the raising and lowering of the removable tray. For additional trays, see Federal Stock Number 6530–793–9570.

STEP 1:

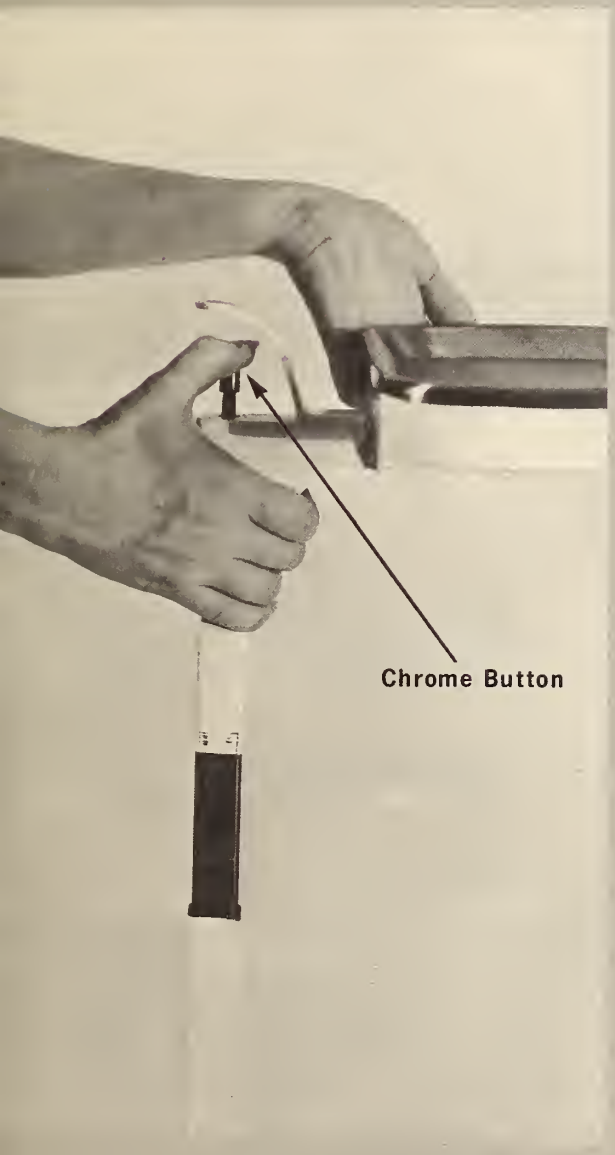
A. Stand comes packed individually in triwall carton.

B. Slit carton lengthwise. Stand is taped to wood block attached to inside of box. Slit tape and pull assembled stand out.
Remove packing.

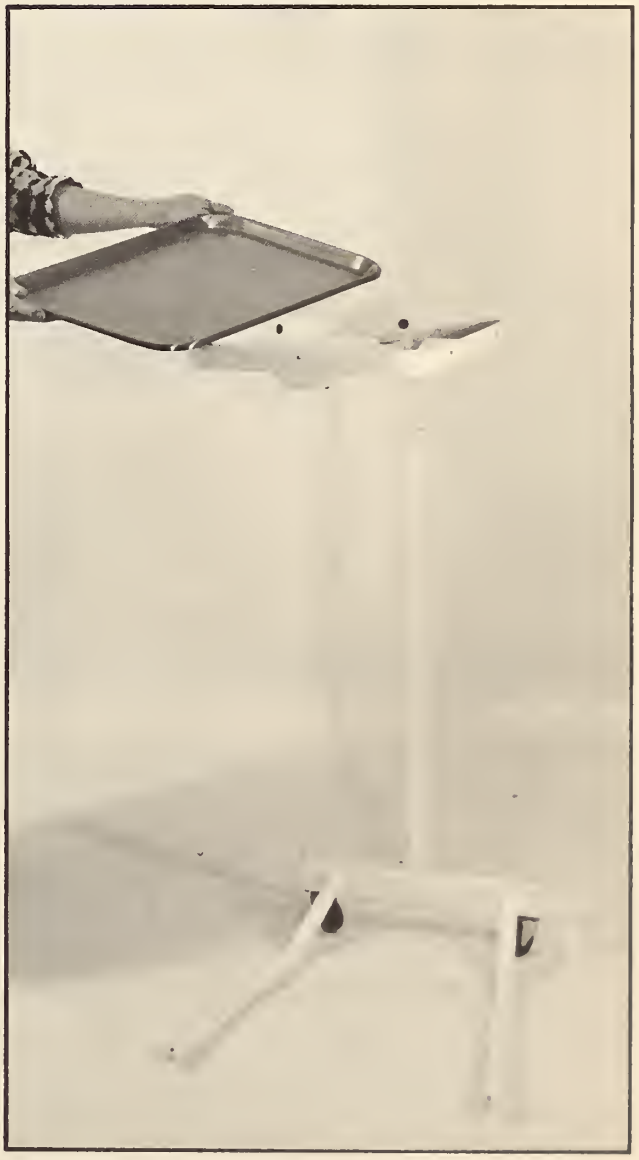


STEP 2:

A. To raise and lower tray, press down firmly on chrome button located on top of back of stand. At the same time, lift upward on the tray support.



B. Tray simply lifts out of stand for cleaning or replacing. Casters are attached to base so stand may be moved about with little or no effort.



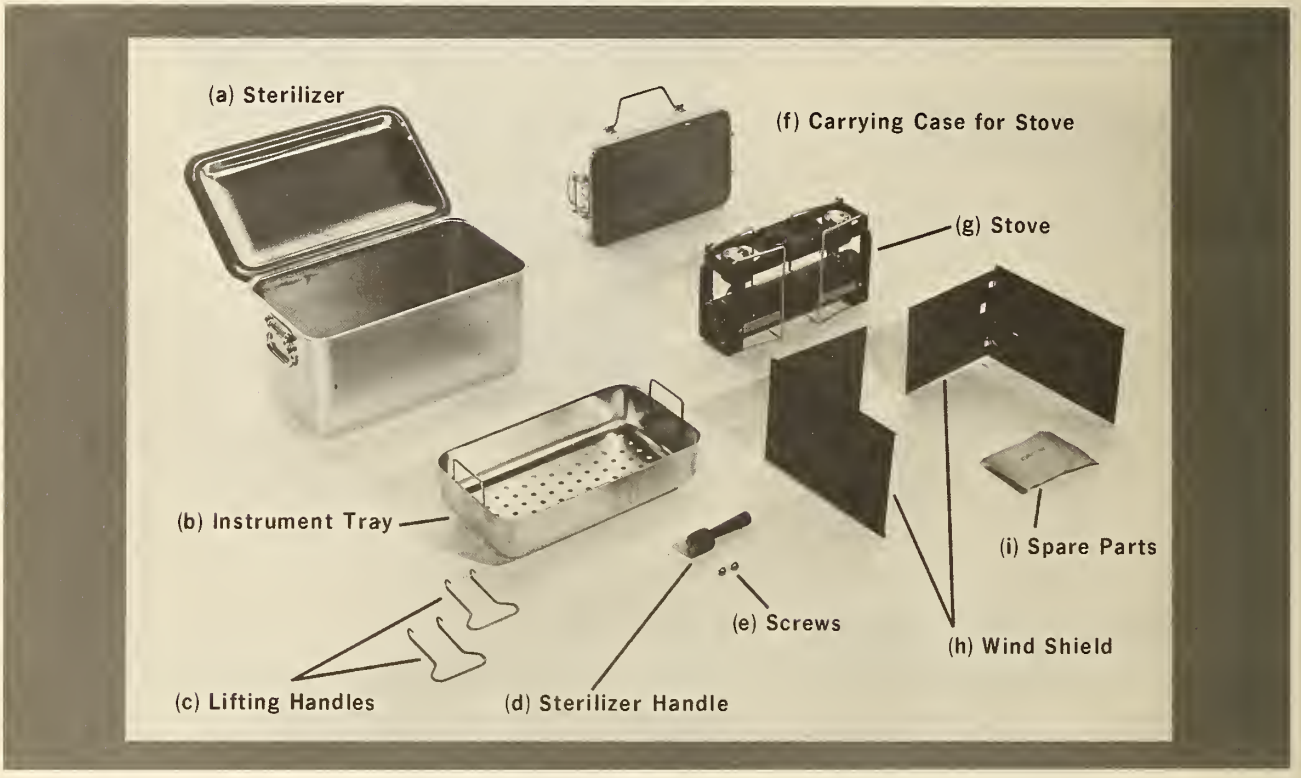
STERILIZER, BOILING

FEDERAL STOCK NUMBER:	6530-708-4735
FEDERAL NOMENCLATURE:	STERILIZER, SURGICAL INSTRUMENT, FUEL HEATED
HOSPITAL SERIES:	54000, 55000, 56000, 57000

This sterilizer is packed in a triwall fiberboard carton along with its own heating unit which is contained in a metal case packed inside the sterilizer. The sterilizer is already assembled with the exception of the lock-type handle. The stove burns any gasoline, including leaded, and is equipped with a windshield which may be added when used out-of-doors or in a draft. When other heating equipment is available, the use of the stove will be unnecessary.

STEP 1:

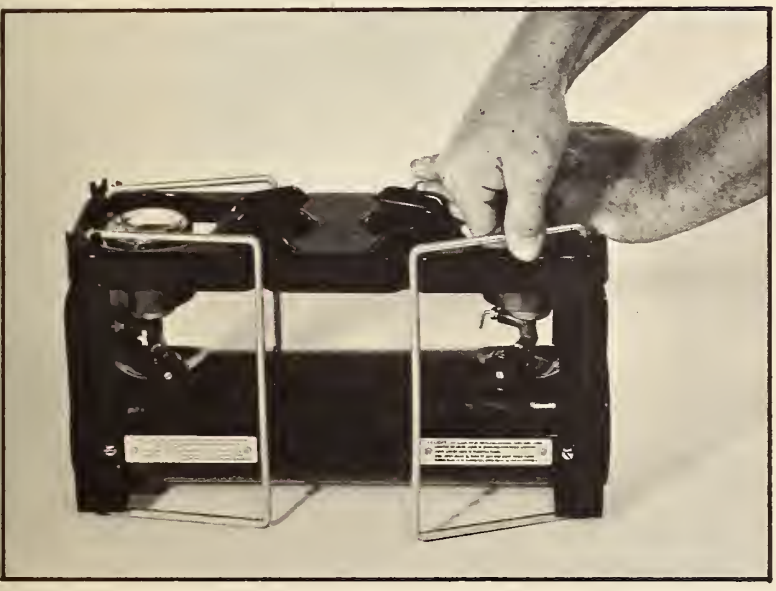
A. Open the fiberboard carton by slitting tape with any sharp instrument. Lift out the components.



B. Components shown in photograph comprise the sterilizer and stove. The sterilizer parts are: (a) sterilizer, (b) instrument tray, (c) handles for lifting tray, (d) sterilizer handle, (e) screws for attaching handle to sterilizer lid. Stove parts include: (f) carrying case, (g) two-burner gasoline stove, (h) two-part windshield which attaches to folding legs of stove. Spare parts for burners are included in envelope (i).

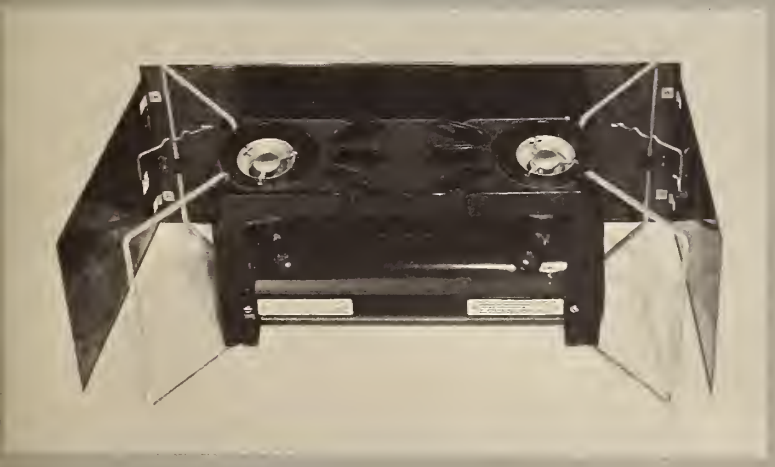
STEP 2:

A. Hold handle (d) firmly against outer lid of sterilizer (a) as shown, attaching screws (e) from inside. Test handle to make certain lid locks in place securely.



STEP 3:

A. Pull firmly up on each hinged leg of stove (g) before pulling out to standing position. Legs lock in place in slots in corners of stove.



STEP 4:

A. If windshield (h) is needed, snap into place on rear legs of stove as shown.

TO BE OBTAINED LOCALLY:

Gasoline.

STERILIZER, COOKER

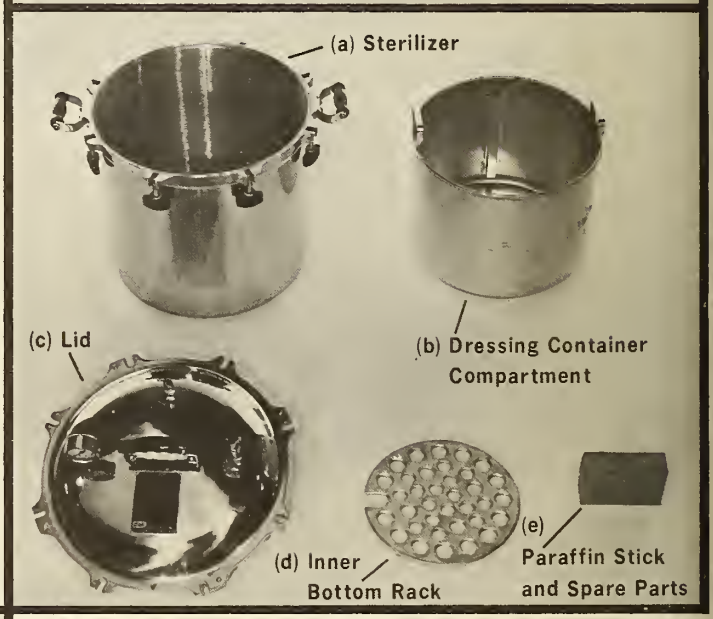
FEDERAL STOCK NUMBER:	6530-000-0004
FEDERAL NOMENCLATURE:	STERILIZER, INSTRUMENT AND DRESSING, PRESSURE COOKER TYPE
HOSPITAL SERIES:	54000, 55000, 56000, 57000

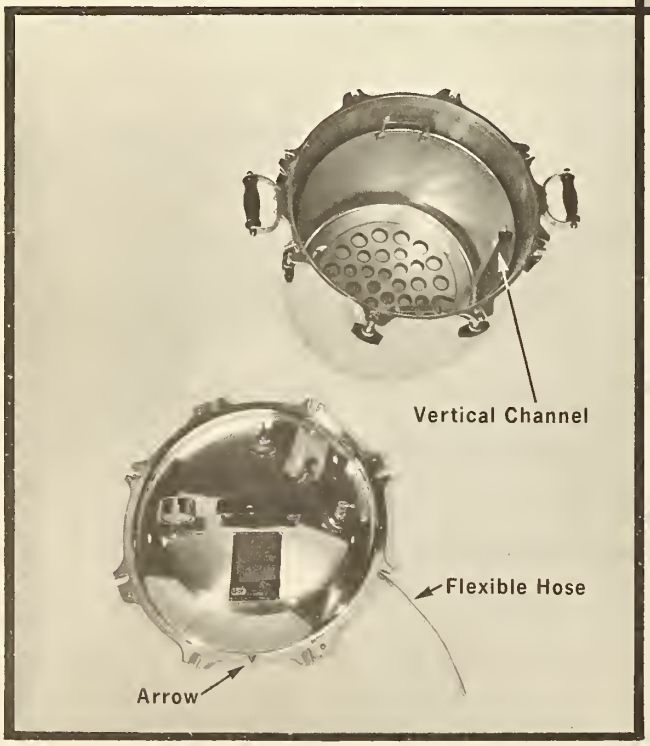
It is improbable that this sterilizer would be set up unless it was being loaded for use. This is with the exception, of course, of a training exercise. The instructions following are primarily for the use of a person experienced in sterilization who is not familiar with this particular unit. Also packed with the PDH, Federal Stock Number 6530–000–0006, are perforated Dressing Containers which may be used with this sterilizer.

STEP 1:

A. Each sterilizer is packed in a fiberboard carton. Open the carton by slitting the taped top with any sharp instrument. Some sterilizers will be encased in a heavy polyethelene bag; others in conventional packing materials.

B. Sterilizer components pictured are: (a) sterilizer, (b) dressing container compartment, (c) lid, (d) inner bottom rack, and (e) kit containing paraffin stick and spare parts.



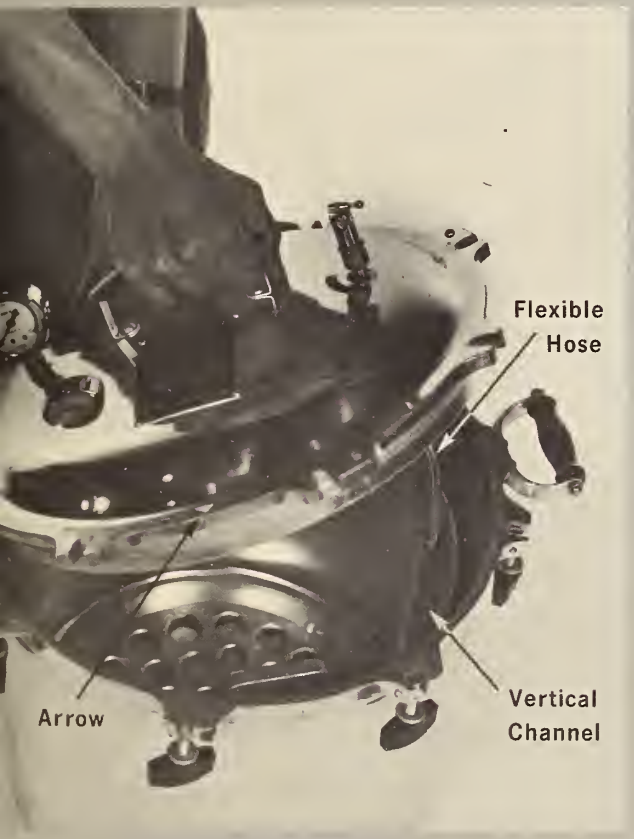


STEP 2:

A. Set inner rack (d) in bottom of dressing container compartment (b). Place dressing container in sterilizer. Make certain that vertical channel on dressing container is on the right as shown.

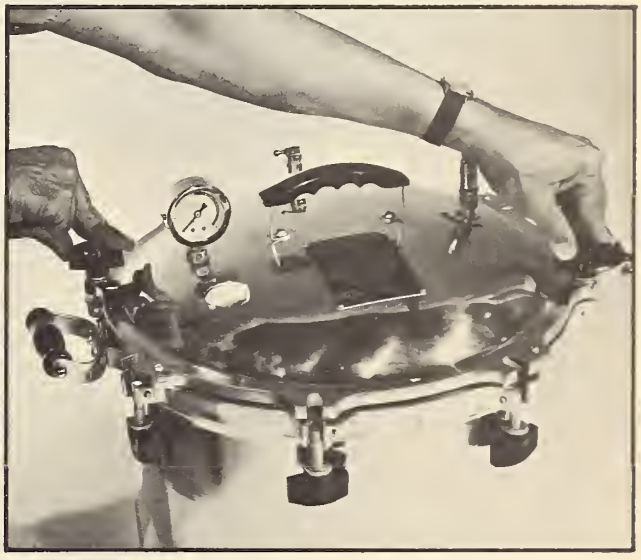
STEP 3:

A. With arrow and gauges on lid facing front (air-ejector valve attached to flexible hose on right), place lid on sterilizer, threading hose through vertical channel on dressing container as lid is lowered.



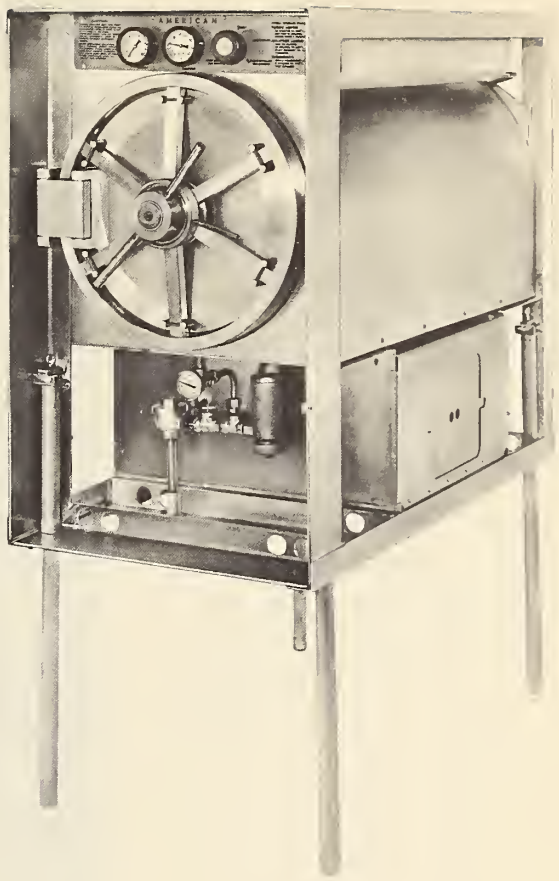
STEP 4:

A. To seal lid, swing bolts into notches of cover, then tighten any two bakelite wing nuts. Continue tightening opposite nuts until all are secured.



B. If sterilizer is being prepared for immediate use, pour one quart of water into bottom of sterilizer (a), soften the paraffin stick (e), and run it around the outer rim of the sterilizer. This affords a tight seal when the sterilizer is heated. Vaseline will suffice in the absence of paraffin.

STERILIZER, FLOOR MODEL



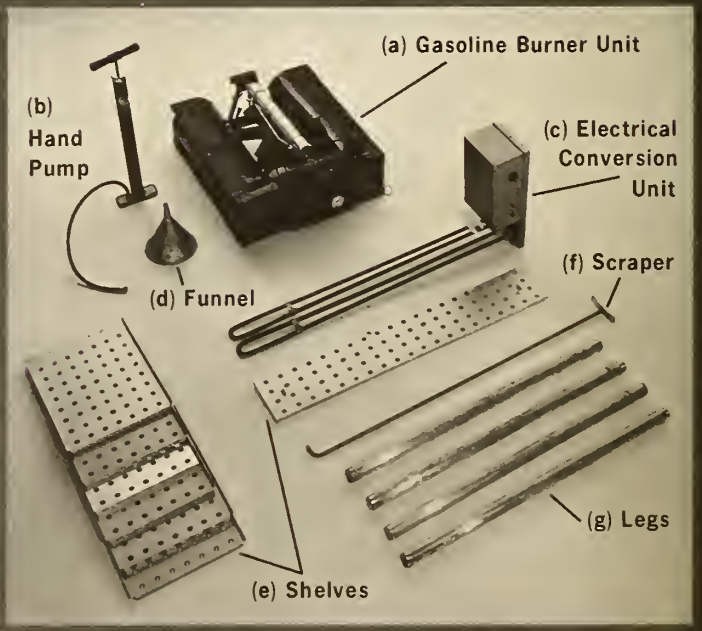
FEDERAL STOCK NUMBER:	6530-781-3683 (6530-000-0011)
FEDERAL NOMENCLATURE:	STERILIZER, SURGICAL INSTRUMENT AND DRESSING, 16 X 36″
HOSPITAL SERIES:	62000 AND SUPPLY ADDITIONS

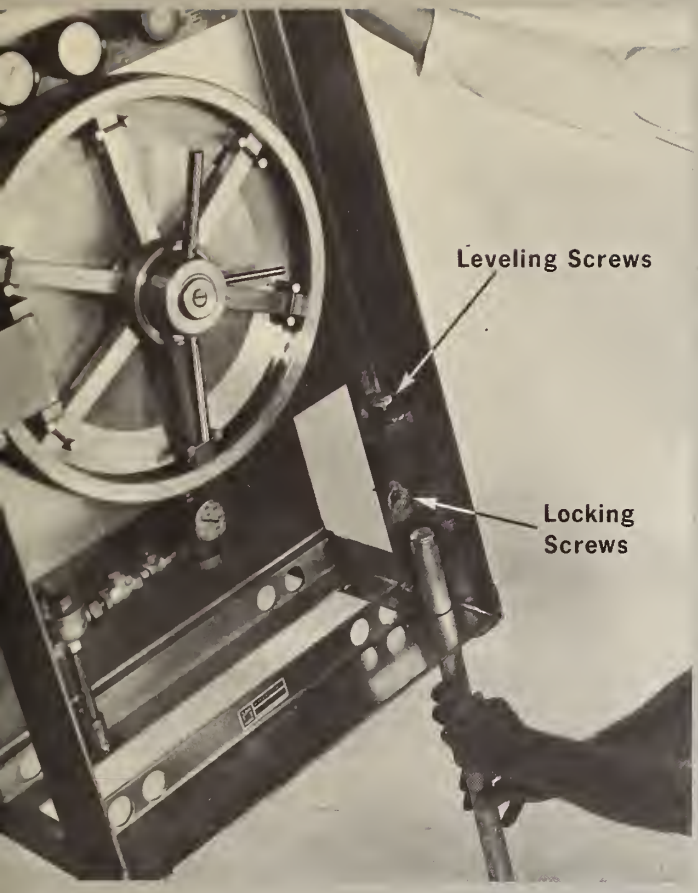
This sterilizer weighs about 400 pounds unpacked. If at all possible, it should be handled with a lift or hoist. When operated electrically, it will be necessary to procure electrical cable locally. The power supply is 220 volts—60 cycles, or 440 volts—60 cycles, both AC. The magnetic contactor has a dual voltage coil which will enable an electrician to wire for either 220- or 440-volt operation. When the gasoline burner is used to heat the sterilizer, it will be necessary either to operate the unit out-of-doors, indoors with windows open, or, ideally, indoors with the fumes vented out through a stovepipe attached to the top of the sterilizer. The stovepipe must be obtained locally.

STEP 1:

A. With hammer and crowbar found in PDH toolbox, remove top of crate and knock both ends off. Remove boxes containing components, tools, and spare parts. Knock sides of crate off and remove packing. Sterilizer may then be lifted off base for insertion of legs.

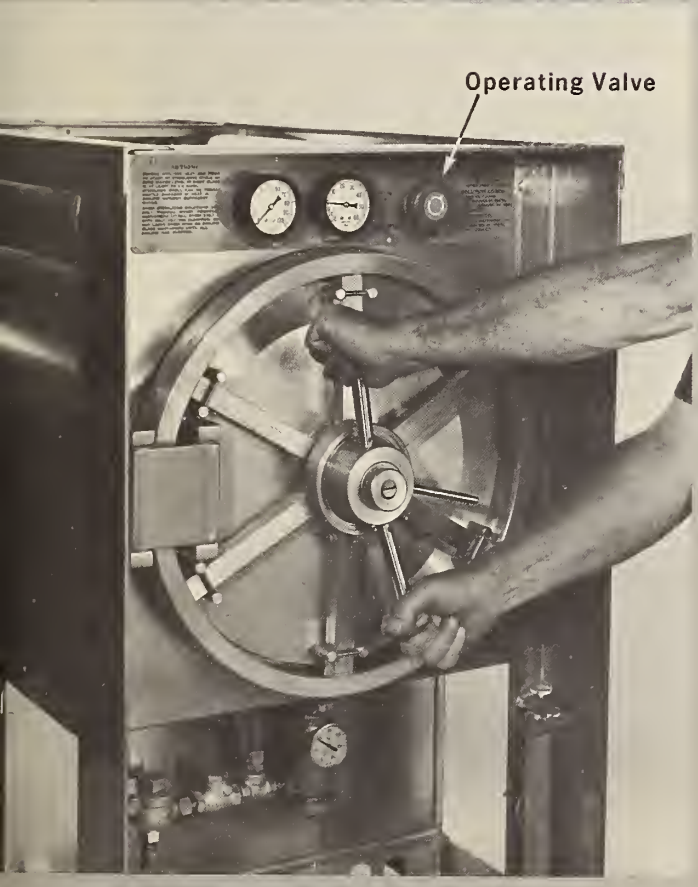
B. Sterilizer components with the exception of the sterilization chamber with internal dimensions of 16″ x 36″ are shown. They are: (a) gasoline burner unit, (b) hand pump for creating air pressure in tanks, (c) electric conversion unit, (d) funnel for chamber drain, (e) shelves, (f) scraper for cleaning jacket, and (g) legs.





STEP 2:

A. If no lift or hoist is available, three men should lift sterilization chamber while fourth inserts legs through holes in bottom of frame. Legs should be removed from storage in bottom of chamber before it is lifted. Legs are leveled by adjusting screws on brackets holding tops of legs. Legs are locked in place by tightening thumb screws behind frame holding legs.



STEP 3:

A. To open sterilizer door, turn the double handle counterclockwise.

B. Pull up on latch handle until door-locking arms are retracted. This will open door.

STEP 4:

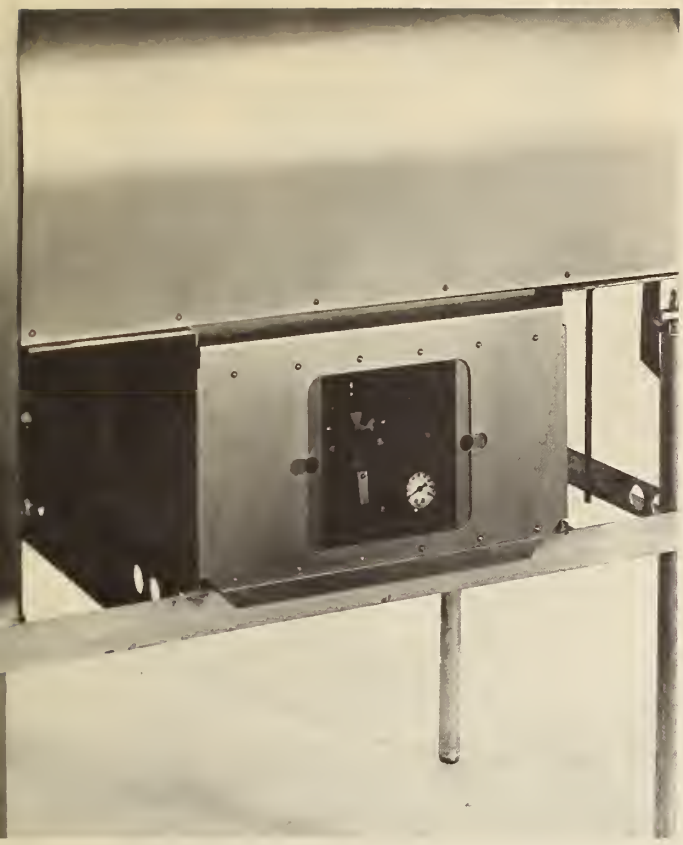
A. Shelves (e) may be arranged as desired by sliding into brackets inside chamber.

STEP 5:

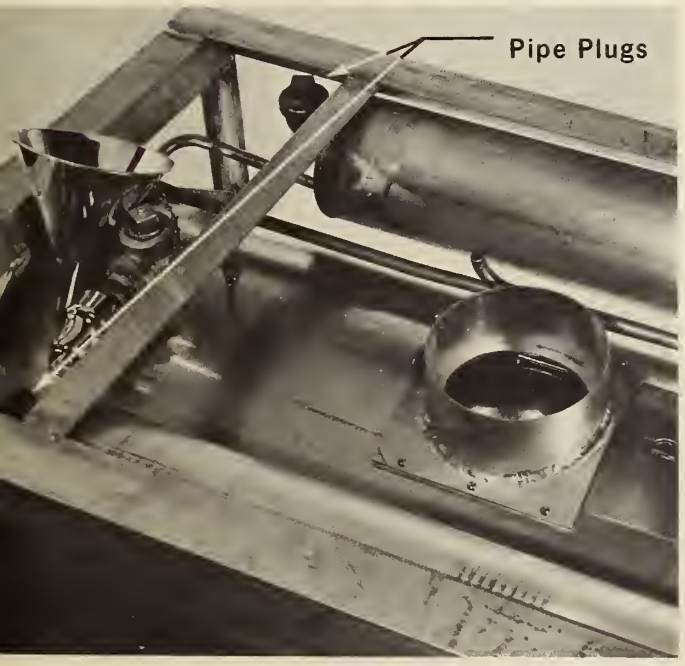
FOR USE WITH GASOLINE BURNER UNIT.

(SEE ALTERNATE STEP 5 FOR USE WITH ELECTRICAL CONVERSION UNIT.)

A. Remove door panel on side of sterilizer. Gasoline burner unit (a) is slipped in opening, drawer fashion. Gasoline will be poured in tank on right; air will be pumped into left tank. Follow instructions attached to unit for pumping air pressure and adjusting flame. Use pump (b) to create air pressure.



B. Replace door panel. Door may be opened or closed by sliding to right or left.



C. To vent fumes, open sliding panel on top of sterilizer chamber. Be sure that maximum opening is obtained as pictured. Standard stovepipe may be attached to vent opening.

PRECAUTION:

Do not operate with gasoline in closed room without adequate ventilation. Attendant may be overcome by fumes.

ALTERNATE STEP 5:

FOR USE WITH ELECTRIC CONVERSION UNIT

A. Remove four nuts and washers over studs on back of sterilizer chamber to release cover and gasket from the jacket cleanout opening. Remove cover from electric conversion unit (c).

B. Make certain gasket is in place over heating elements of conversion unit (c) before inserting elements into jacket cleanout opening. Place the electric control box over the four studs on the outside of the opening and secure it with four screws and four lock washers.

C. Replace the four nuts and washers previously removed (A) from the studs.

D. Using 200-volt electrical cable obtained locally, electrician can hook cable into control box and connect to 220-volt outlet. Follow wiring diagram on back of control box.

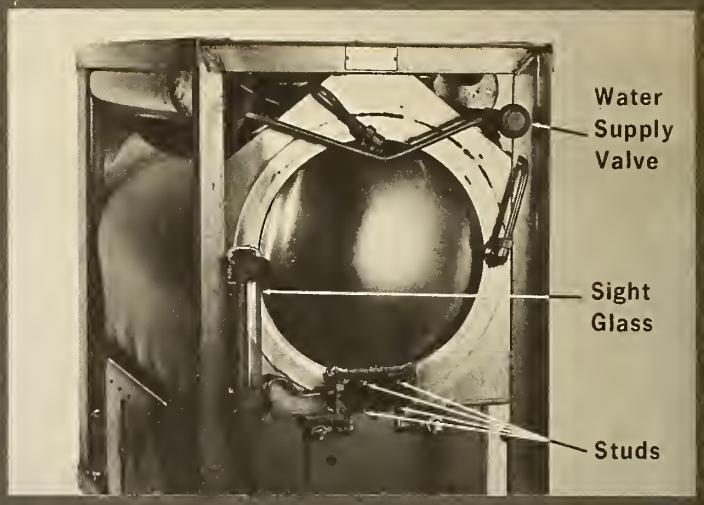
E. Photo illustrates correct position of vent opening when electricity is used.

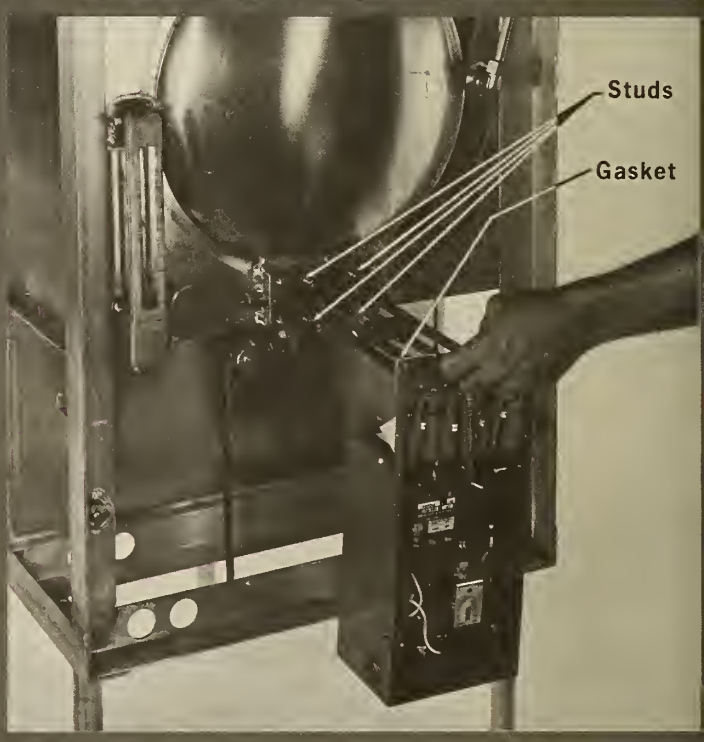
STEP 6:

A. To fill water tanks and jacket, remove pipe plugs as shown in photo, page 111, Step 5, C, on water tanks located on either side of top of sterilizer. Using attached funnel, fill tanks with water. Open water supply valve, page 112, Alternate Step 5, A. Turn operating valve (see photo Step 3) to "Sterilizer" position. Water will flow through tanks to jacket. Fill jacket until sight glass (see photo, Step 5, A) shows "Full." Close water supply valve immediately. Turn operating valve to "Off." Continue filling until both tanks are full. Replace pipe plugs.

TO BE OBTAINED LOCALLY:

Electrical cable. When electricity is not available, gasoline and stovepipe for venting fumes.





E.

STERILIZER AND STOVE,

Table Model

FEDERAL STOCK NUMBER: 6530-781-3684 (6530-000-0010)

FEDERAL NOMENCLATURE: STERILIZER, SURGICAL INSTRUMENT AND DRESSING

HOSPITAL SERIES: 62000 AND SUPPLY ADDITIONS

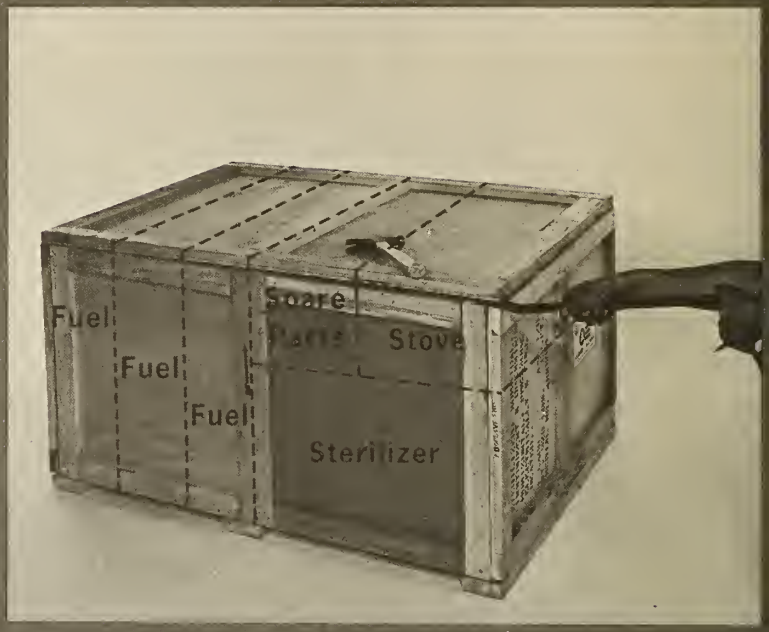
This 8″ x 8″ x 16″ pressure sterilizer may be heated electrically or with its own auxiliary heating unit. A fuel supply is included in the packing case. The sterilizer is shown mounted on the auxiliary heating unit.

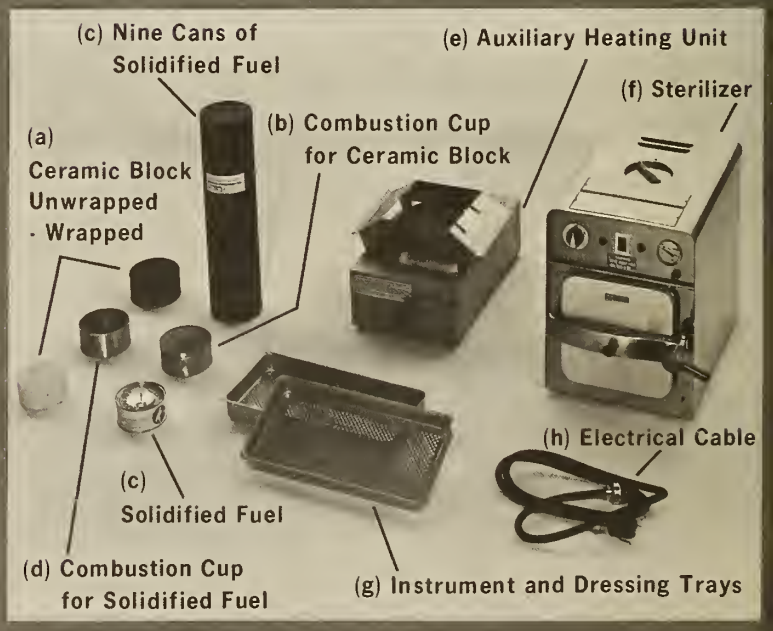
STEP 1:

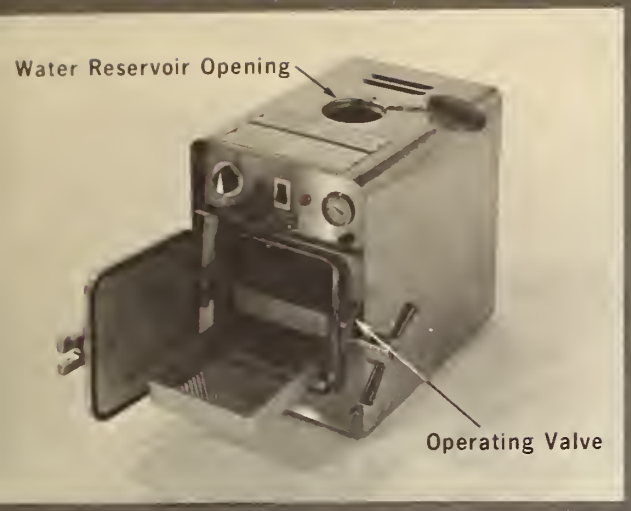
A. The sterilizer, heating unit, spare parts, and fuel are packed in a cleated plywood box which should be opened by removing the top with a crowbar and hammer or other tools found in the PDH toolbox.

B. If the box is opened as pictured, three cartons wrapped in waterproof paper containing fuel will be packed on the left. If the sterilizer is to be operated electrically, it will not be necessary to unpack these cartons.

C. Individual components are: (a) ceramic block, (b) asbestos lined combustion cup for holding ceramic block, (c) solidified fuel, (d) combustion cup for holding can of solidified fuel, (e) auxiliary heating unit to be used with either solidified fuel or gasoline-soaked ceramic block, (f) sterilizer, (g) trays for holding instruments and dressings to be sterilized, and (h) electrical cable for use when 110-volt, separate circuit outlet is available. Cord is equipped with adapter, may be used in either double or triple prong outlet.







CAUTION: *Before sterilizer is put into service, the water reservoir must be filled with approximately three quarts of water. Distilled or demineralized water is recommended if available. Remove the water reservoir cover (do not attempt to detach chain) and fill to about ½" below the filling opening. Replace cover. Open sterilizer door and push the operating valve down. When water in chamber reaches the water level indicator, pull operating valve up. Water should barely touch bottom edge of word "Level."*

STEP 2:
(TO HEAT STERILIZER ELECTRICALLY)

A. Attach electrical cord (h) into connection at rear of sterilizer (f). Plug cord into electric outlet of voltage specified on rear of sterilizer. A 110-volt outlet (normal household) is sufficient if the sterilizer is the only piece of equipment plugged into the circuit.

B. A two-prong adaptor is attached to the cord (h). When the adapter is used, it is best to ground the attached wire.
See page 73, Step 4 for grounding procedure.

STEP 2A:
(TO HEAT STERILIZER WITH AUXILIARY HEATING UNIT AND CERAMIC BLOCK)

A. Insert abestos-lined fuel combustion cup (b) into fuel cup holder. *Never* use unlined cup with ceramic block.

B. Preferably out-of-doors, soak unwrapped ceramic block (a) in liquid gasoline 10 to 12 minutes. Remove block from gasoline.

C. Insert gasoline-soaked ceramic block (a) into fuel cup (b) as shown.

D. Move flame control level to far left. If sterilizer is to be used immediately, ignite fuel and rapidly close drawer. Height of fuel drawer knob may be adjusted to prevent initial sooting and to obtain maximum heat. See Step 3 before placing sterilizer on heating element.

EXERCISE USUAL CARE WHEN HANDLING GASOLINE. DO NOT SMOKE OR WORK NEAR FLAME—DO NOT INHALE FUMES, ETC.

STEP 2B:

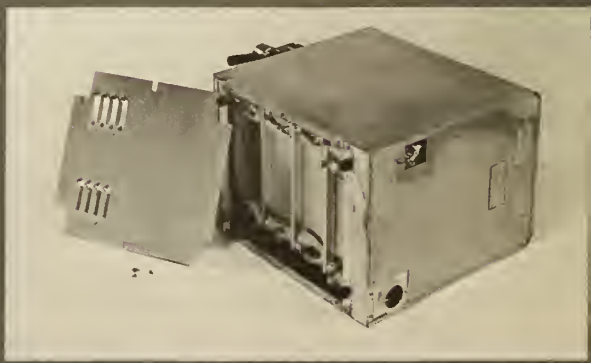
(TO HEAT STERILIZER WITH AUXILIARY HEATING UNIT AND SOLIDIFIED FUEL)

A. Use same procedure as Step 2, A, except that combustion cup (d) is inserted in holder and opened can of solidified fuel (c) is placed in cup (d).

STEP 3:

A. Before placing sterilizer on auxiliary heating unit (e), remove bottom cover of sterilizer (f). This is accomplished by removing four screws which hold the cover in place.

B. Insert the second and third bars of the sterilizer bottom into the slots on the top of the auxiliary heating unit. It is not necessary to replace the sterilizer bottom cover if it is later possible to operate the sterilizer electrically. The heating unit may then serve as a stand.



TO BE OBTAINED LOCALLY:

(When solidified fuel supply is exhausted and electrical power is not available) Gasoline.

L. P.
GAS STOVE

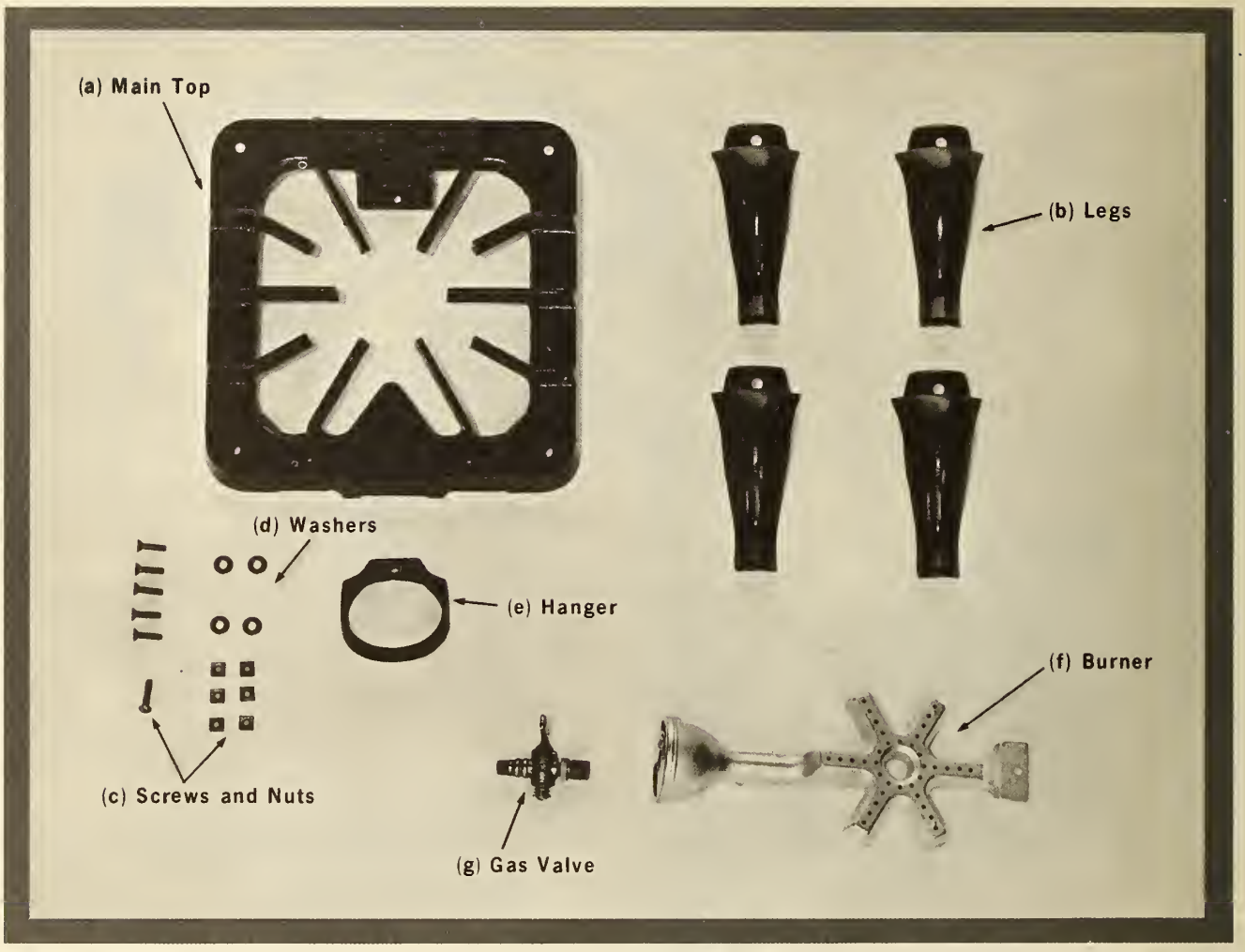
FEDERAL STOCK NUMBER:	7310-000-0002
FEDERAL NOMENCLATURE:	STOVE, L.P. GAS, SINGLE BURNER
HOSPITAL SERIES:	54000, 55000, 56000, 57000

Stoves packed with Hospital Series 54000, 55000, and 56000 are slightly smaller than those in the 57000 Hospitals. The basic difference between the stoves is in size only and the following instructions will apply to all stoves carrying Federal Stock Number 7310–000–0002. L. P. Gas, tubing, and adapters are not included in the hospitals. They must be procured locally. The stove may be hooked up to a natural gas supply if available. However, the valve is preset for L.P. Gas and must be reset if natural gas is used. See instructions in the container for adjusting the valve.

217-167 O-66—6

STEP 1:

A. Remove parts from fiberboard carton. They should include: (a) main top, (b) four legs, (c) six screws and six nuts, (d) four washers, (e) hanger, (f) burner, and (g) gas valve.



STEP 2:

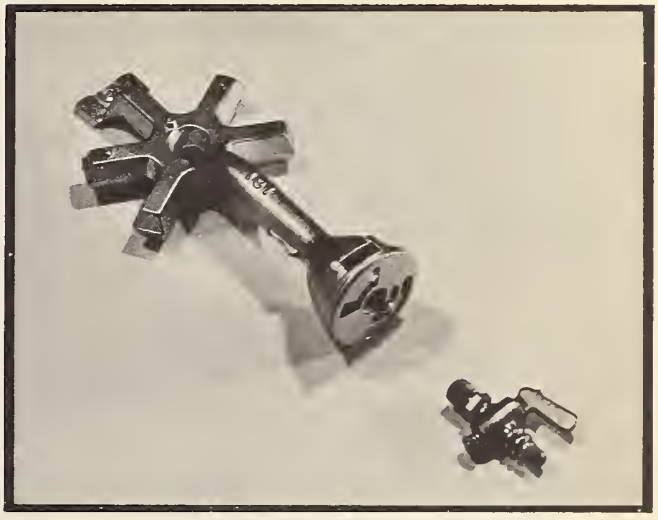
A. Fasten legs (b) to main top (a) by inserting a flathead screw (c) through each corner hole in top (a) and then through the slot in the top of each leg (b). Place a flat washer (d) over the protruding screw and secure with a nut (c).

STEP 3:

A. Hanger (e) is attached to inside wall of main top (a) with a roundhead screw and a nut (c). Screw is inserted through front of top (a) and then through hanger (e). Tighten securely.

STEP 4:

A. Screw gas valve (g) into hole in air shutter of burner (f). When tightening valve, exercise caution in application of wrench. Excessive pressure can alter the L. P. Gas adjustment.



STEP 5:

A. Insert gas valve end of burner (f) through back of hanger (e). Bolt burner (f) to main top (a), inserting roundhead screw (c) through burner (f), then through bracket on back of top (a). Secure with nut (c).

STEP 6:

A. Procure locally tube or hose, adapter, regulator, fittings if needed, and tanks of L. P. Gas.

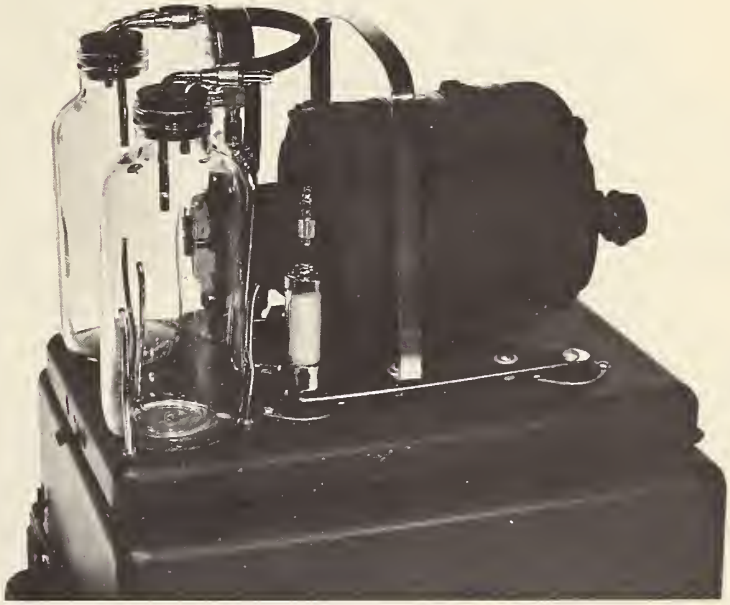
B. The adapter is screwed firmly to burner valve and tube or hose is connected to the adapter. Hose or tube is then attached to regulator which then is connected to the gas tank.

NOTE: To test flame, light stove by turning handle to "ON" position and holding match slightly above the burner opening. Flame height and intensity is adjusted by opening or closing the valve handle.

TO BE OBTAINED LOCALLY:

L. P. Gas Tanks, adapters, and tubing for connecting tank to stove.

SUCTION AND PRESSURE APPARATUS

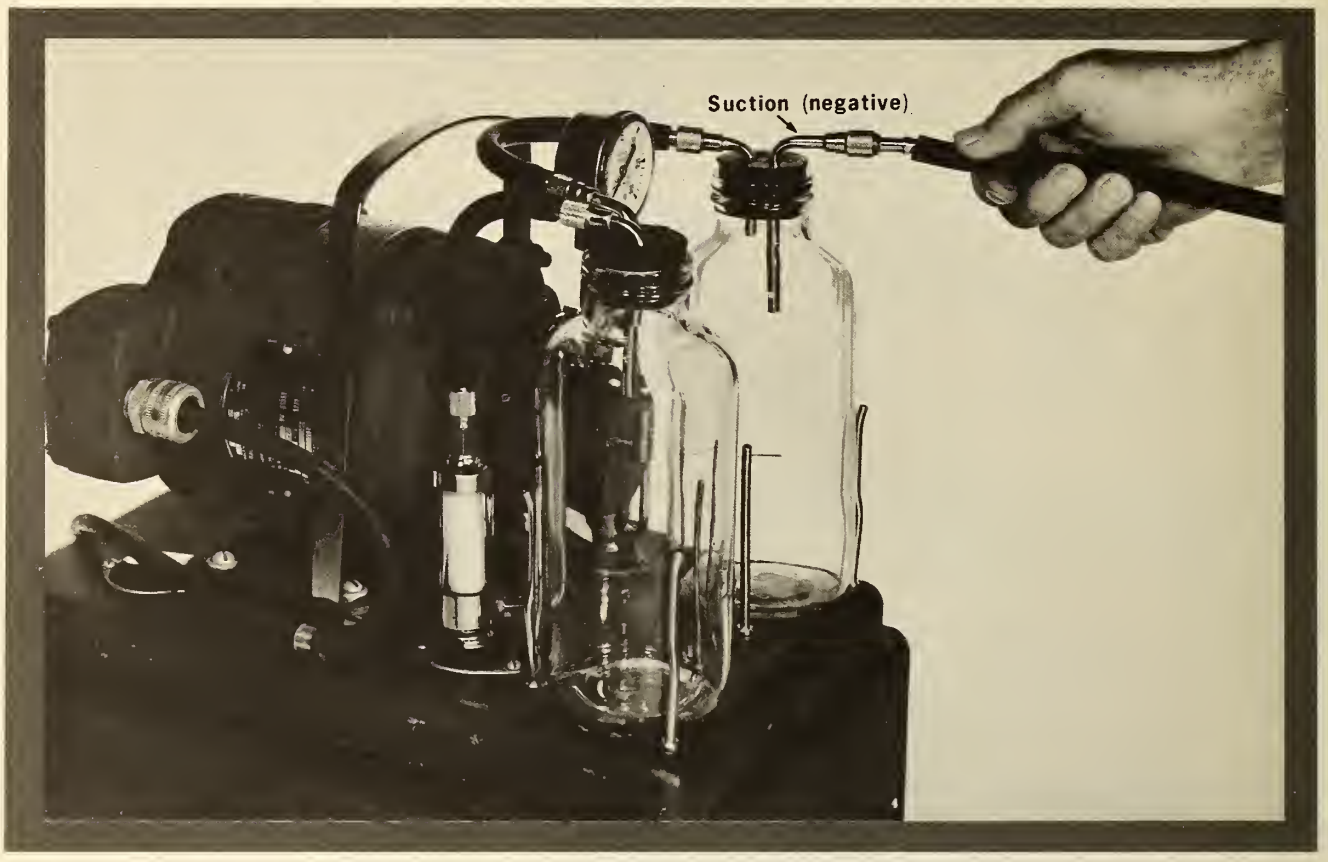


FEDERAL STOCK NUMBER:	6515-299-8337
FEDERAL NOMENCLATURE:	SUCTION AND PRESSURE APPARATUS, SURGICAL, PORTABLE
HOSPITAL SERIES:	62000, 57000, 56000, 55000, 54000

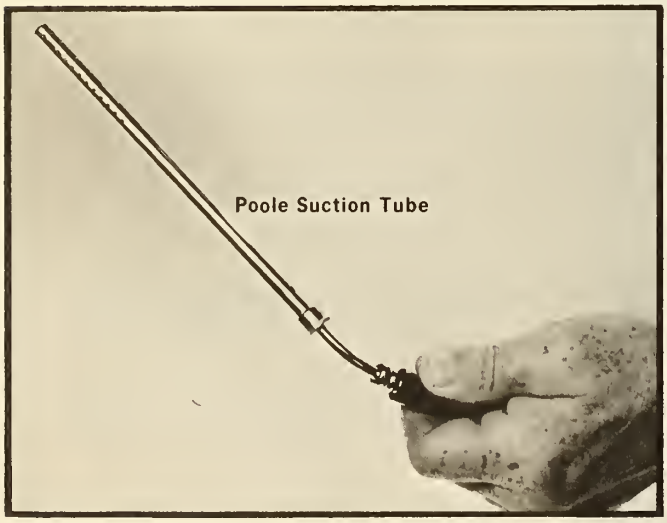
The carrying case in which the Suction and Pressure Apparatus is packed may be used as a stand while it is in use. The unit is already assembled with the exception of the spray tube and the suction hose and tubes which are packed in compartment in top of cover. Sprays must be obtained locally. Before starting motor, remove all packing material and be sure that all hose connections are tight and that rubber stoppers in both suction bottles are firmly seated. This will prevent leakage of suction.

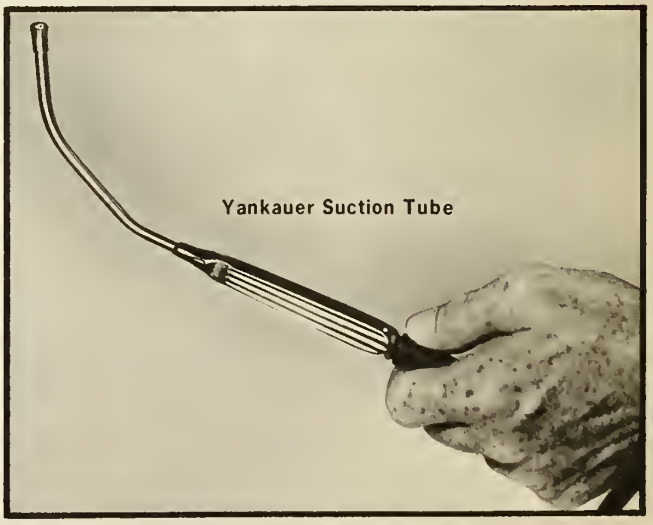
STEP 1:
FOR SUCTION:

A. Attach extension hose to suction (negative) side of unit by pressing either end firmly over coupling.



B. Attach loose end of extension hose to suction tube as shown in photographs below. Photo at lower left shows Poole abdominal suction tube correctly attached. Lower right illustrates Yankauer laryngeal suction tube ready for use by physician.





STEP 2:
FOR SPRAYING:

A. On pressure (positive) side of unit, connect spray tube with Miller cut-off to filter by pushing hose firmly over chrome coupling. Miller cut-off fits standard sprays (not shown).

TO BE OBTAINED LOCALLY:

Sprays fitting Miller cut-off.

OPERATING TABLE

FEDERAL STOCK NUMBER:	6530-709-8155
FEDERAL NOMENCLATURE:	TABLE, OPERATING, FIELD
HOSPITAL SERIES:	54000, 55000, 56000, 57000, 62000

The manufacturer of the five operating tables included in each hospital packs each table first in its own fiberboard carrying case, next in a corrugated fiberboard carton, and finally in a wirebound wooden box.

Any table that has been repackaged due to servicing, use, or routine inspection will not have been replaced in a wirebound box. Instead, the carrying case will have been placed in a triwall corrugated fiberboard carton. This carton may be opened easily by slitting the tape with any sharp instrument.

Care should be exercised in setting up this table—not because the assembly is unduly complicated—but because painful injury may result from a finger being caught in one of the many hinges necessary to hold the table in position.

The six carriage bolts included with the table have square fittings near the head which slip into square holes in the inside legs and side braces of the table. This prevents the bolts from slipping when tightened. The carriage bolts to be positioned properly must be fastened with the wing nuts on the *outside* of the table.

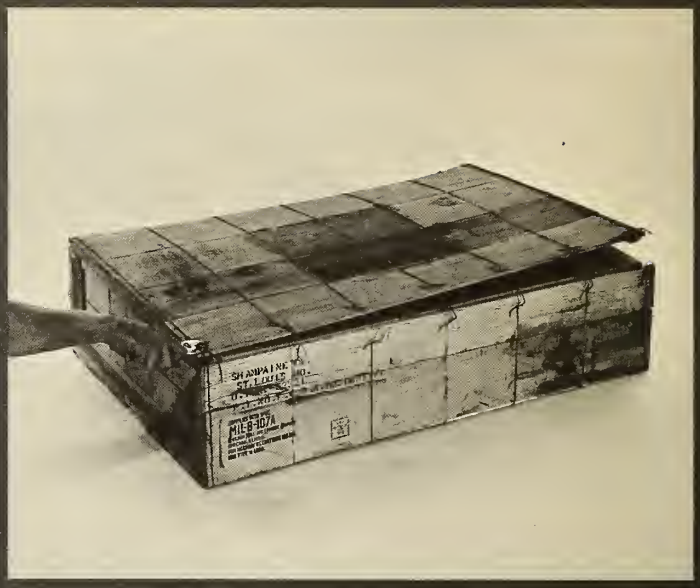
STEP 1:

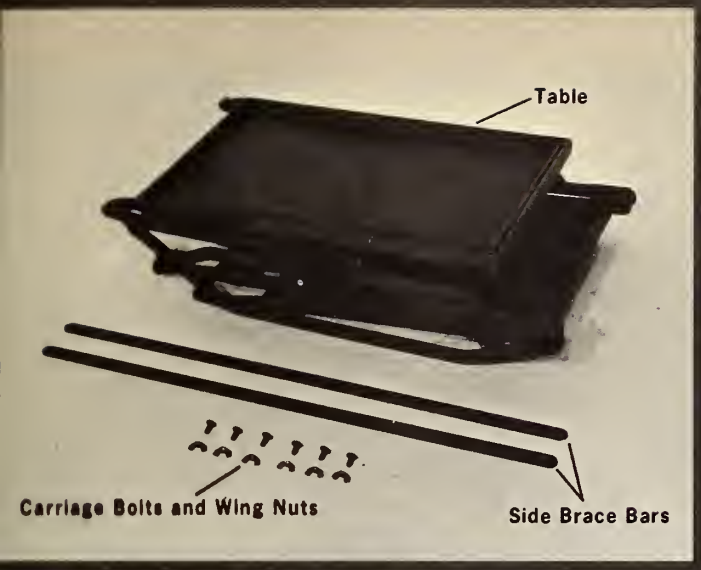
A. With pliers found in toolbox provided with hospital, release wire catches on wooden box.

B. With hinged lid pulled up and back, turn box upside down to remove carton.

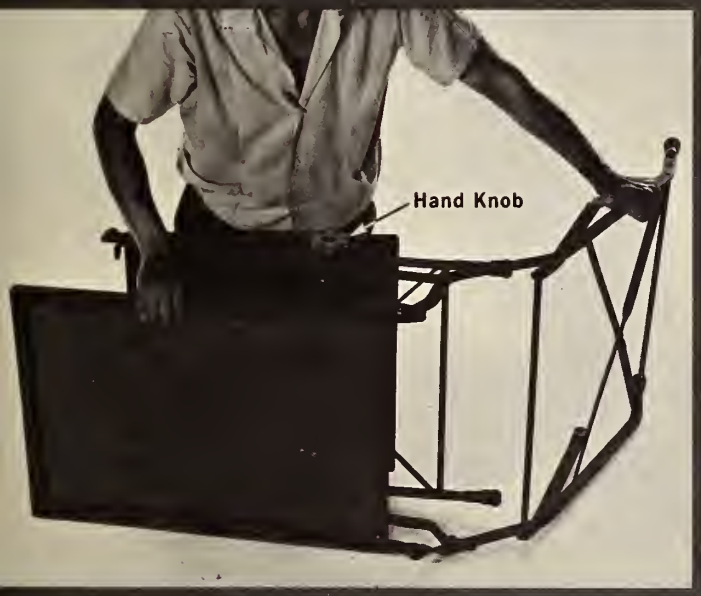
C. Using any sharp instrument, slit tape to open carton. Remove case containing table.

D. Open hinged "suitcase-type" lid. Lid will fall back affording easy removal of table and other components.





E. Components include preassembled folded table, six carriage bolts, six wing nuts, and two side brace bars.



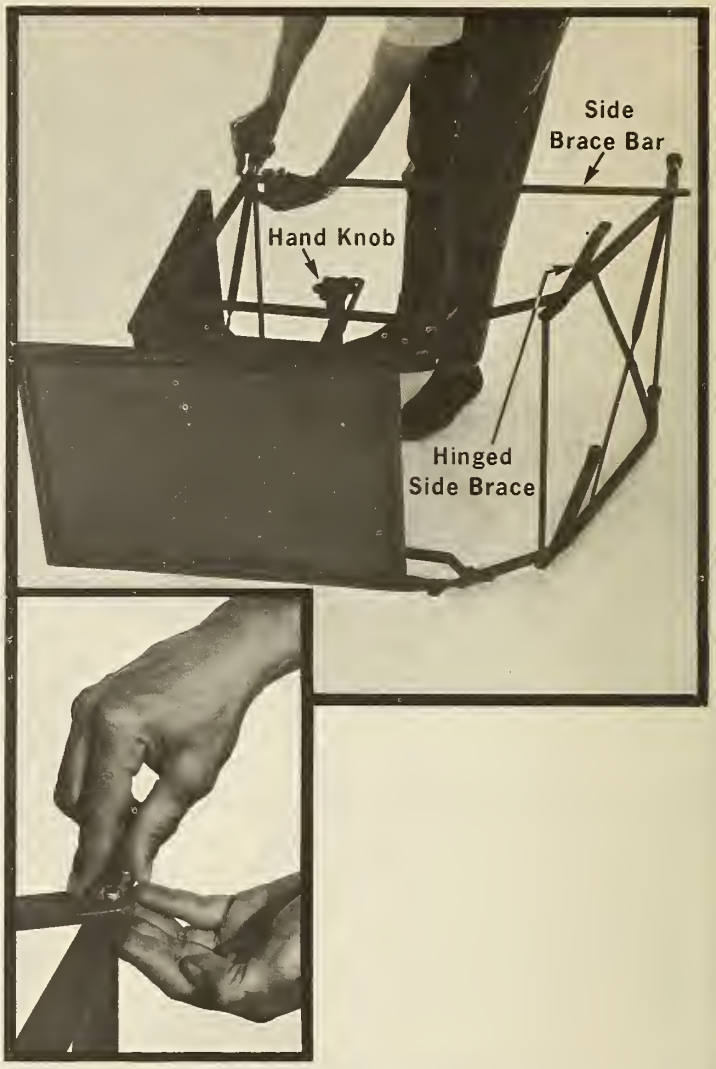
STEP 2:

A. Place table on side, hand knob up. Loosen knob and swing rear legs back and out.

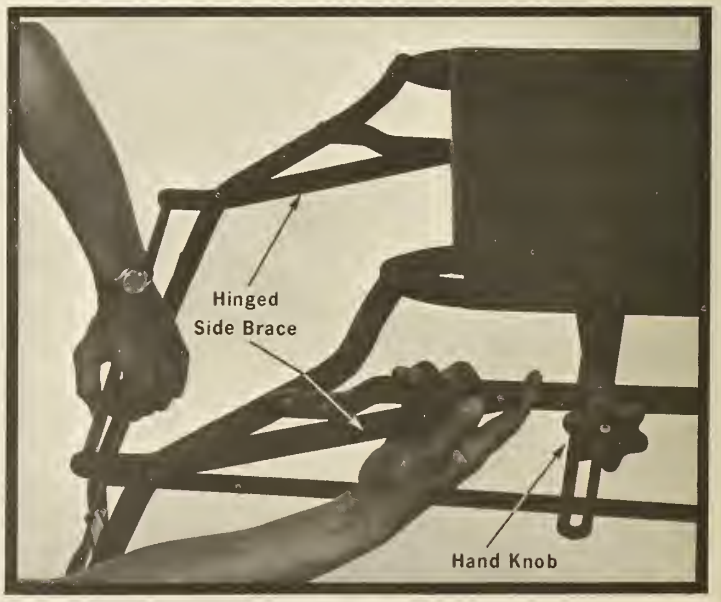
B. Swing seat section and front legs out making certain that the seat section rests on the stops located on top of the front legs.

STEP 3:

A. Attach one side brace bar with carriage bolts and wing nuts, with wing nuts outside.



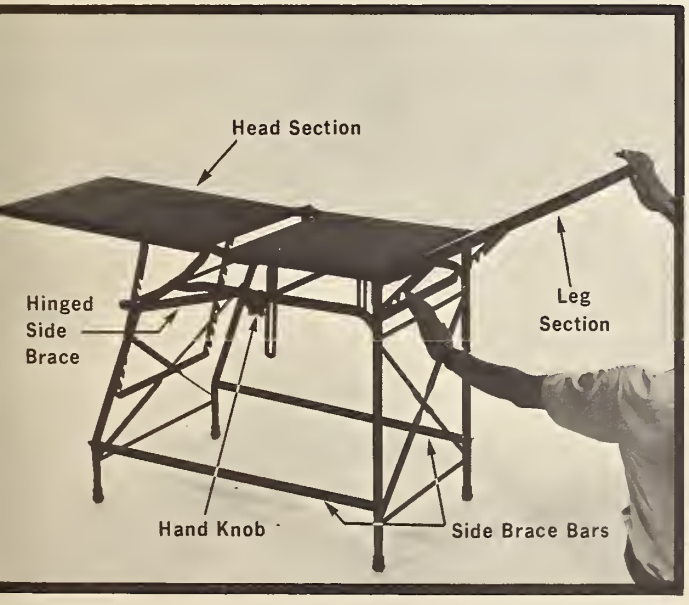
B. Move one hinged side brace into position as shown and fasten with carriage bolts and wing nuts, tightening wing nuts firmly from outside.



STEP 4:

A. Table should now be placed on its legs in an upright position. Fasten second hinged side brace same as Step 3, B, and attach other side brace bar same as Step 3, A.

B. Swing head section back and engage on cross bar of hinged side brace as shown.



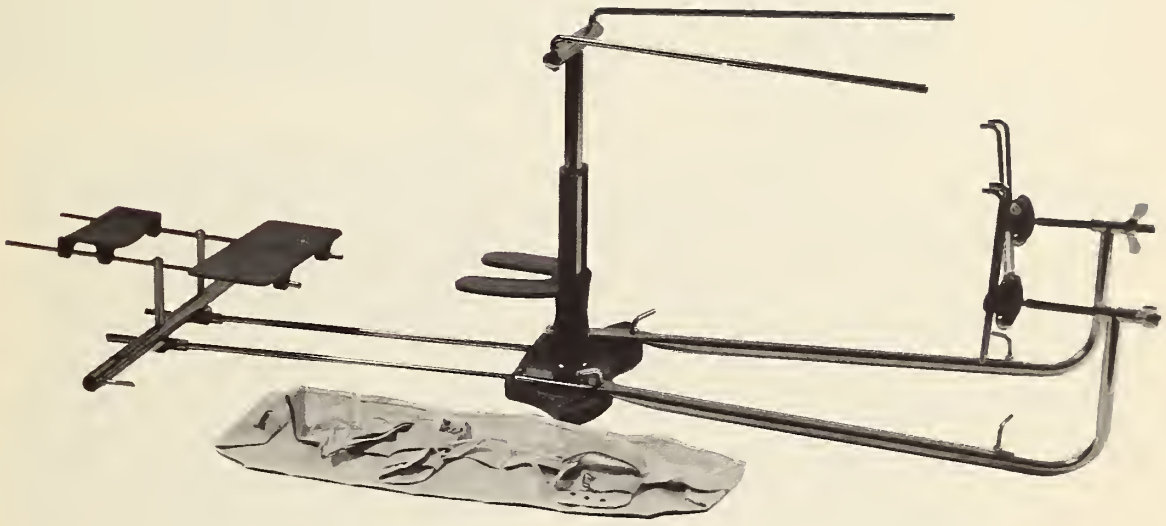
STEP 5:

A. Raise leg section and engage rack over support rod as shown.

STEP 6:

A. When table is fully assembled, tighten hand knob. Hand knob must be loosened to adjust position of table. Be sure to retighten firmly before weight is placed on table.

TRACTION APPARATUS



FEDERAL STOCK NUMBER:	6530-709-9400
FEDERAL NOMENCLATURE:	TRACTION APPARATUS, BONE FRACTURE
HOSPITAL SERIES:	62000 AND SUPPLY ADDITIONS

Although this orthopedic traction apparatus consists of many parts the assembly is not complicated if illustrated instructions are followed without exception. Instructions on the use of ankle hitch and body assemblies are not included since this is a medical procedure performed by a specialist for the specific patient.

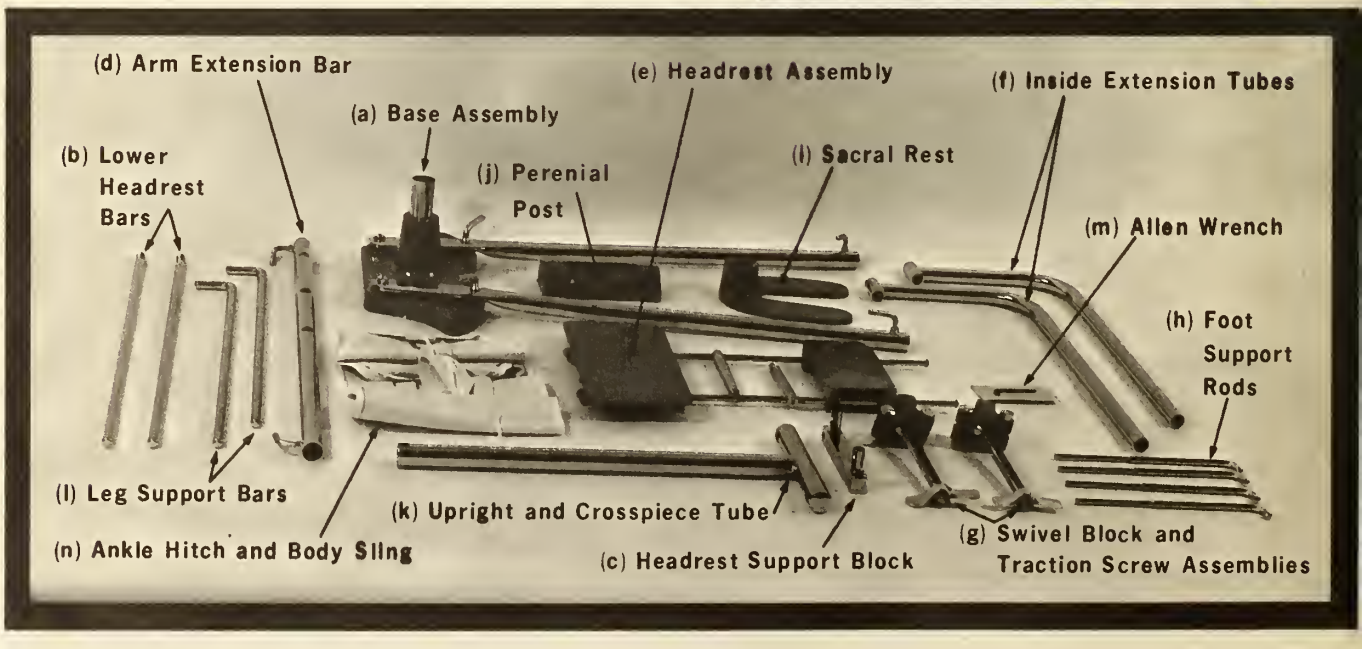
STEP 1:

A. Traction apparatus is packed in fiberboard carton. Slit tape with any sharp instrument to open.

B. Remove olive drab hinged carrying case.

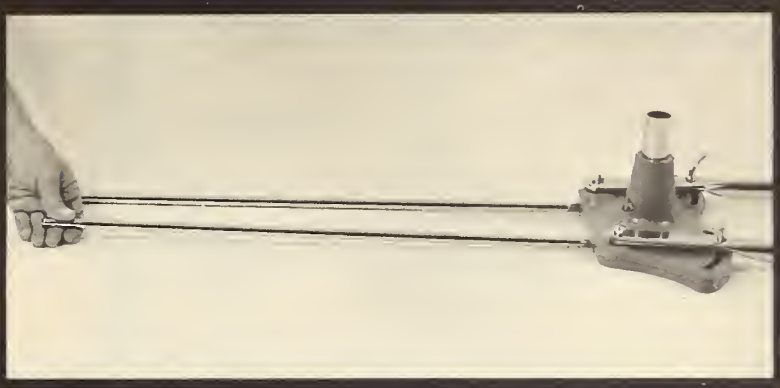
STEP 2:

A. Open case and remove all components shown in illustration. They will include: (a) base assembly, (b) lower headrest bars, (c) headrest support block, (d) arm extension bar, (e) headrest assembly, (f) inside extension tubes, (g) swivel block and traction screw assemblies, (h) foot support rods, (i) sacral rest, (j) perenial post, (k) upright and crosspiece tube, (l) leg support bars; and for use by technicians in orthopedic procedures with patients, (m) allen wrench, and (n) ankle hitch and body sling assemblies.

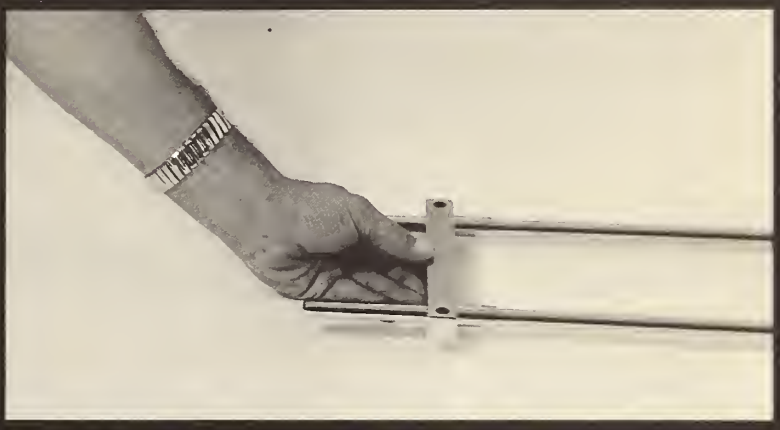


STEP 3:

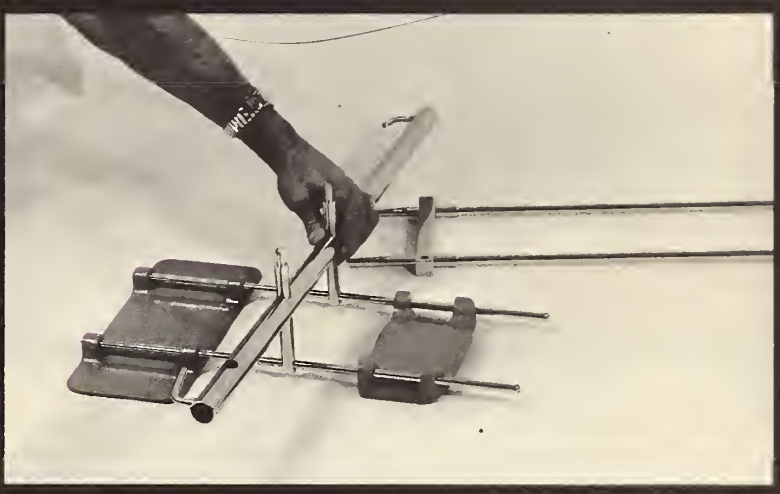
A. Screw lower headrest bars (b) into base assembly (a).



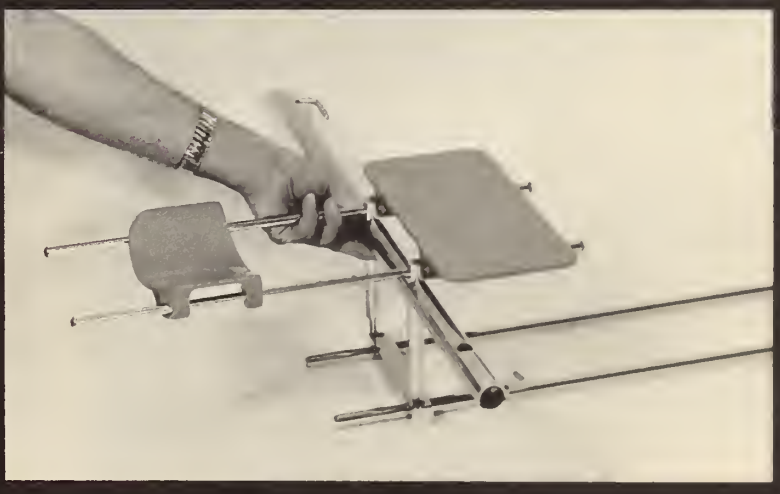
B. Slide headrest support block (c) over ends of lower headrest bars (b).

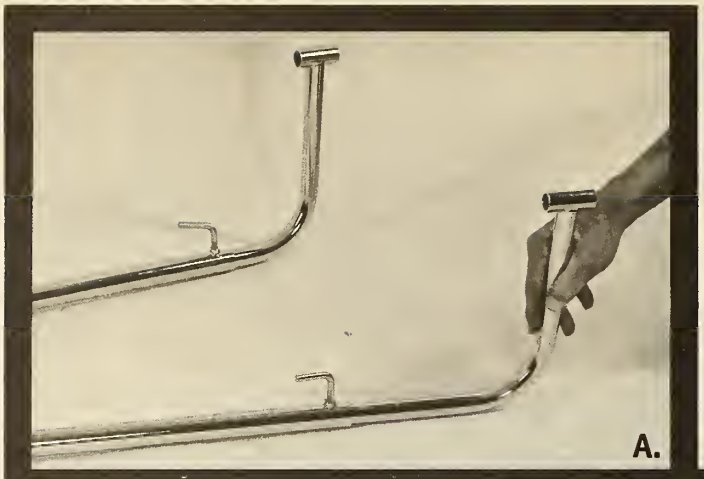


C. With headrest assembly (e) upside down, raise tubes and insert arm extension bar (d) over tubes while they are in an upright position. Slide bar firmly downward as far as possible. Return headrest assembly (e) to upright position.



D. Place tube endings on headrest assembly (e) into matching holes in headrest support block (c).

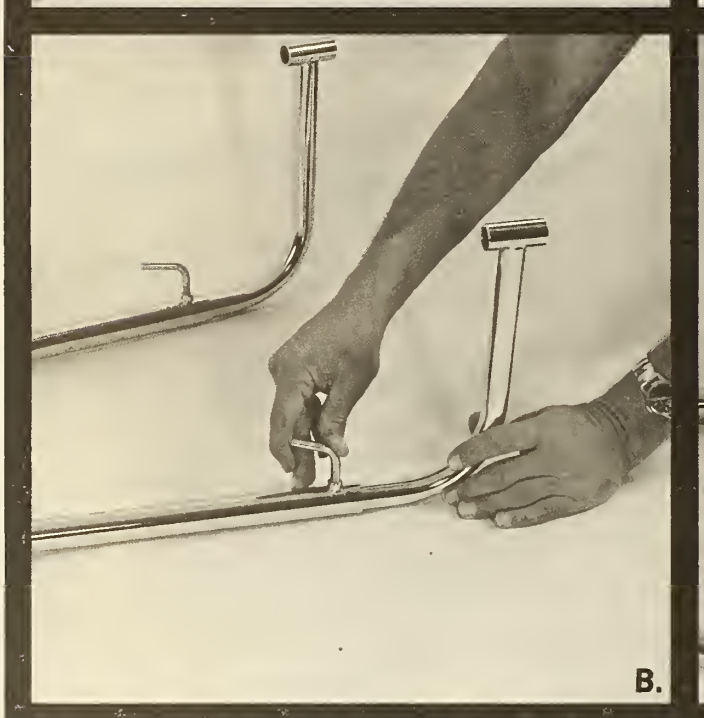


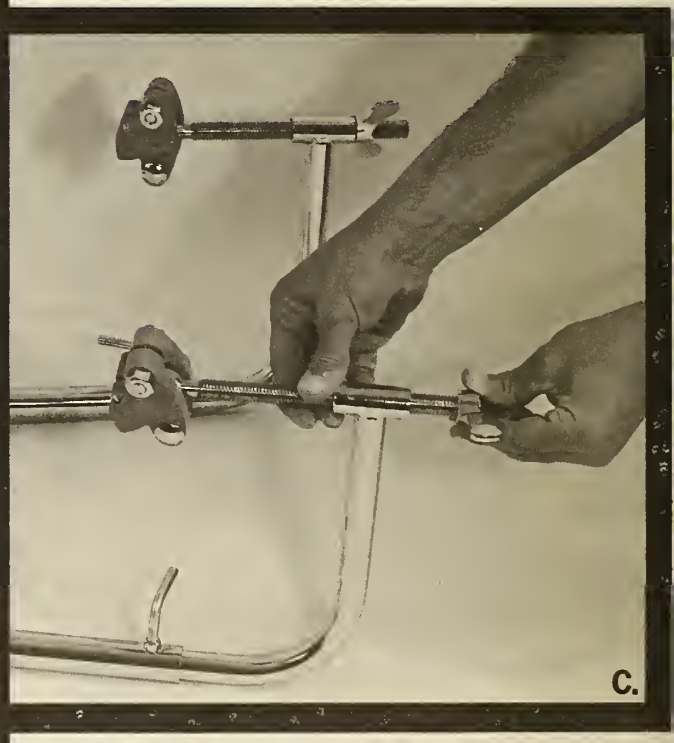


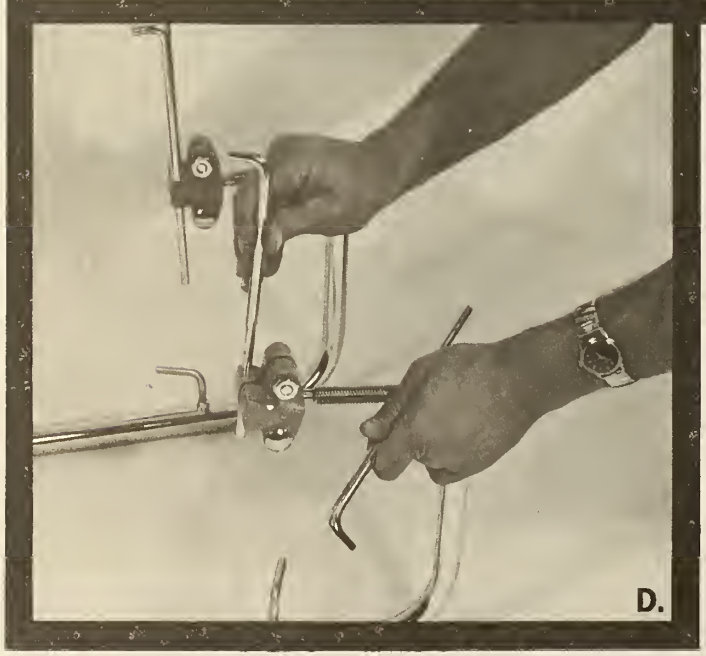
STEP 4:

A. Move to opposite end of apparatus and position the two inside extension tubes (f) into the outside extension tubes on base (a).

B. Secure inside extension tubes (f) by turning tightening screws on outside extension tubes (a).

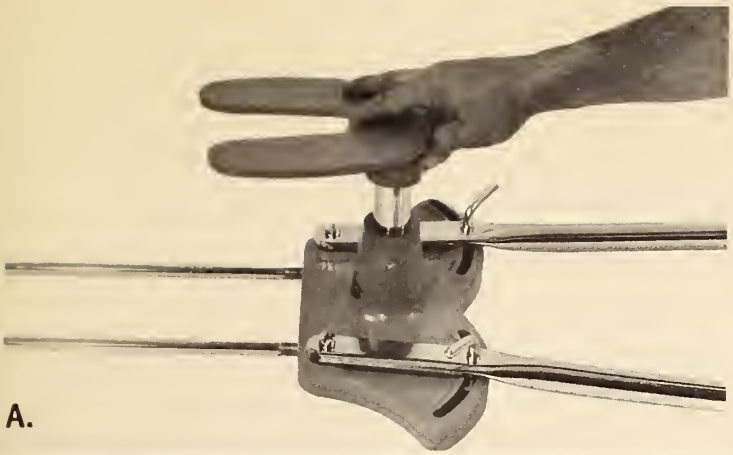






C. Remove wing nuts from swivel block and traction screw assemblies (g). Place screws through end collars of inside extension tubes (f). Replace the wing nuts on the traction screws.

D. Two foot support rods are placed in holes in the swivel blocks (g).



A.

STEP 5:

A. Returning to base assembly (a), place the sacral rest (i) on the vertical tube of the base with the pin fitted into small hole on the base.

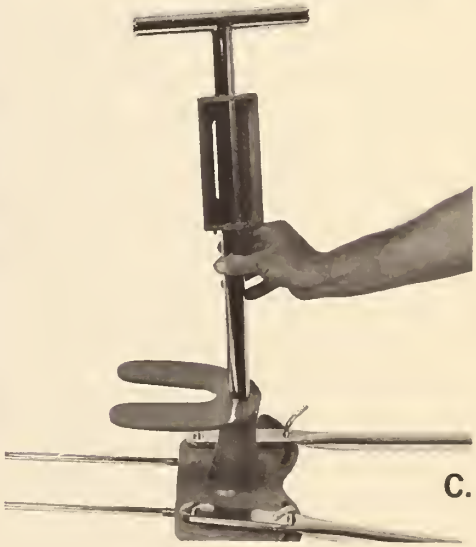
B. Slip the perenial post (j) over base end of the upright and crosspiece tube (k).

C. Then place upright (k) into base (a) through sacral rest (i).

D. Twist upright (k) and post (j) until both slip into locking position.

E. Place leg support bars (1) in holes in top of cross section of upright (k). Make certain that allen wrench (m) and ankle hitch and body slings (n) are near apparatus for use of physician or other medical personnel.

B.



C.

E.

D.

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